AFMC CUSTOMER SATISFACTION STUDY AT THE AIR LOGISTICS CENTERS

THESIS

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AFIT/GLM/ENS/08-5

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AFIT/GLM/ENS/08-5

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Thesis

Presented to the Faculty

Department of Logistics Management

Graduate School of Engineering and Management

Air Force Institute of Technology
Air University

Air Education and Training Command

In Partial Fulfillment of the Requirements for the

Degree of Master of Science in Logistics Management

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March 2008

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Abstract

The purpose of this research was to determine Air Force Material Command's (AFMCs) external customer issues and satisfaction levels as measured and compared by Air Logistics Center. Specifically, this project sought to answer how AFMC's Air Logistics Centers were performing based on survey criteria chosen by AFMC's A4 Logistics division. This research was guided by a previous Graduate Research Project (GRP) effort, which sought to determine how customer relationship management (CRM) initiatives varied in the private and public sectors, and to determine an appropriate means of capturing and measuring this type of data for AFMC. The research question was answered through a comprehensive literature review, and the use of survey methodology. Over thirty-six hundred external customers were given the opportunity to participate in the web based survey. The results were analyzed in an effort to determine what was important to AFMC's customers and identify future areas for improvement. Comparisons were made between the Air Logistics centers as well as the previous research conducted by Sullivan (2006) and this current research effort. The research identified that, to date, the Customer Support Centers at the Air Logistics Centers are providing consistent, valuable service to customers. Additionally, this research identified potential areas for customer satisfaction improvements and the need for AFMC to continue in its customer satisfaction improvement efforts.

Acknowledgments

I would like to express my appreciation to my research advisor, Doctor William Cunningham, and my reader Dr. Martha Cooper for their guidance and support throughout the course of this thesis effort. Their interest, insight, and experience were invaluable in keeping my efforts in focus and on schedule. I would also like to extend my appreciation to Mr. Tommy Justice, Wing Commander Douglas Harrop, and Mr. Haider Salahuddin from Air Force Material Command's A4 Logistics Division that contributed to and constantly supported this effort. I would also like to thank my lovely wife for giving me the support and encouragement I needed and for keeping me grounded in what is most important. Above all, I would like to thank the Lord for this opportunity that I have had and the many blessings that he has so graciously provided during this time.

Kelly D. Kendall

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AFMC CUSTOMER SATISFACTION STUDY AT THE AIR LOGISTICS CENTERS

I. Introduction

Background

The Air Force recognizes that transformation from within is critical in order that the warfighter be able to continuously adapt to the ever changing combat environment. To address these transformational initiatives the Air Force has implemented, among several other initiatives, Air Force Smart Operations for the 21st Century (AFSO21) and Expeditionary Logistics for the 21st century (eLog21). AFSO21 is a transformational initiative for all Airmen that eliminates waste from our end-to-end processes (AFSO21 CONOPS, 2007:3). Likewise, eLog21 is a transformation initiative that will change key logistics processes to improve support to the warfighter. In cooperation with these efforts, the Directorate of Logistics division (A4) at Air Force Material Command (AFMC) has made several changes to many of its core processes. One of which is the Air Mobility Command’s move toward a supply process transformation when, in 2006, the command’s five Regional Supply Squadrons were re-designated as the Mobility Logistics Support Centers (LSC). The five centers were reduced to two LSCs located at Scott Air Force Base, Illinois, and Langley Air Force Base, Virginia. "This new structure takes care of our warfighters around the world by giving them support, when they need it, where they need it, in a timely manner," said Brig. Gen. Gary T. McCoy, director of Logistics Readiness for the Office of the Deputy Chief of Staff for Logistics (MAF, 2007). One of the key reasons for this transformation was the desire to increase support to the warfighter and do this more efficiently and effectively. To accomplish this, AFMC is implementing Customer Relationship Management (CRM) as one of its initiatives.

Problem Statement

Due to the CRM initiative mentioned above and the desire on behalf of AFMC to increase customer satisfaction and determine its customers' issues, this research is aimed at measuring AFMCs current customer satisfaction levels and customer issues at the Air Logistics Centers (ALC). Through this initiative, AFMC hopes to increase the level of customer satisfaction and provide better support to the customer. The overall intent of this research is to assist AFMC in the implementation of its CRM initiative with the ultimate goal of improving its processes and increasing customer satisfaction.

Research Objectives/Research Questions & Hypotheses

The purpose of this research is to accurately measure AFMCs external customer issues and satisfaction levels at the Air Logistics Centers (ALCs). The measurements derived from this research will be utilized by AFMC to seek areas for process improvements, and to increase overall customer satisfaction.

The following research question is presented:

What are Air Force Material Command's external customer issues and satisfaction levels as measured and compared by Air Logistics Center?

Investigative Questions:

Multiple questions are addressed in order to answer the research question:

1. How are the ALCs performing based on the data collected from the Kendall (2008) survey criteria that were developed by AFMC's A4 Logistics division?

2. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the three ALCs based on the data collected from the Kendall (2008) research survey?

3. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the three ALCs based on data collected from the Sullivan (2006) research survey?

4. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the data collected from the Sullivan (2006) research survey and the data collected from the Kendall (2008) research survey?

Research Focus

The focus of this research is to determine AFMCs current customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division; specifically the customers that receive service from the Air Logistics Centers (ALC) at Tinker Air Force Base in Oklahoma, Warner Robbins Air Force Base in Georgia, and Ogden Air Force Base in Utah. Because this research will be focused toward specific customers of the ALCs, alternative Air Force applications may be limited. However, this research and methodology may serve as a general foundation for the concept of measuring customer issues and satisfaction for other organizations.

Methodology

To identify customer needs and expectations, one should start by going directly to the customer. This requires the use of a measurement tool in order to capture and analyze this information. In the past AFMC has used survey instruments to measure customer expectations and needs. In addition, AFMC has stated its desire for a well-developed survey instrument in order to measure customer satisfaction; therefore, this study focuses on the distribution of a survey instrument that will help identify the current state of AFMCs customer satisfaction and issues, based on the criteria chosen by AFMC's A4 Logistics division.

In order to determine customer relationship issues and customer needs, an organization must first know who its customers are. In a previous research project, Captain Damelsa White determined who AFMC's external customers were and differentiated those customers based on a segmentation model consisting of recency, frequency, and location (Sullivan, 2006:43). However, due to the format of the electronic mail addresses provided by AFMC, White's segmentation of AFMC's customers could not be utilized for this project. To compensate, the survey for this research project contains the same segmentation questions that were incorporated into Sullivan's survey which are based on White's segmentation model of recency, frequency, and location. Customers' electronic mail addresses, for the three ALCs, were derived from Structured Query Language (SQL) databases at Ogden Air Force Base in Utah (Ogden also maintains Warner Robin's ALC information) and Tinker Air Force Base in Oklahoma. Currently, the customer support centers at each of these locations maintain databases on their customers along with their contact information. Each Customer Service Center at the Air Logistics Centers provided the required databases to compile customer contact information.

Limitations

A limiting factor to this research is the information databases that are currently utilized to capture customer information. At present, Mobility Air Force (MAF) customers are expected to call the Logistics Support Centers (LSCs) at Scott Air Force Base in Illinois and Combat Air Forces (CAFs) are expected to call the LSC at Langley Air Force Base in Virginia. If the LSC does not have the information or expertise to handle the call, the call is then forwarded to the ALC. However, many customers bypass the LSC and call the ALC directly. If a call does not continue past the LSC, all information concerning that call is never captured. Ogden Air Force Base maintains a database that captures all customer information for Ogden ALC and Warner Robbins ALC. Tinker Air Force Base has its own database to capture customer information. This may limit the information obtained for all customers that only contact the LSC.

An additional limitation was the relatively low response rate, with an overall response rate of thirteen percent. The low response rate may have partially been contributed to the time span from which the contact information was derived. The electronic mail addresses, provided by the customer service centers at the ALCs, were dated from June 2006 to June 2007, which meant that it had been over one-and-a-half years since some of the contacts had contacted the CSCs. This may have contributed to the fifteen hundred and sixty electronic mail addresses that returned as invalid. Additionally, eleven individuals responded that they had never contacted or received service from the customer service center, and this could have been an indication that more of the contacts were invalid but simply deleted the survey electronic mail solicitation.

Assumptions

1. An adequate number of customers will respond to the survey in order to complete the analysis and make logical conclusions.

Implications

Through this initiative, AFMC will be better equipped to implement CRM which will allow them to more effectively communicate with customers, improve operational efficiencies, decrease costs, and improve customer satisfaction. Additionally, as AFMC seeks to implement Customer Relationship Management as one of its transformation "pillars", and capitalize on benchmarking some of the leading business practices in the industry, more Air Force organizations will be able to follow AFMC's example by truly putting the customer first and focusing on better business processes and products.

II. Literature Review

Chapter Overview

The purpose of this literature review is to develop a thorough understanding of customer satisfaction prior to developing and implementing a measurement instrument for Air Force Material Command (AFMC). This literature review will begin with a broad overview of CRM and AFMC's initiatives to date to measure customer satisfaction as a component of CRM. This literature review will then define customer satisfaction, followed by an examination of the practices of award winning customer-focused organizations. Finally, this literature review will establish the necessity to measure customer satisfaction, analyze current customer satisfaction measurement methods, and examine some general guidelines for how often to measure customer satisfaction.

What is CRM?

Today's market competition is fiercer than ever. With the accessibility of the internet and the implementation of advanced information technologies, the ability to satisfy and thereby retain a customer has grown increasingly more difficult. As a result, organizations are seeking ways to build customer relationships in an effort to gain customer loyalty. One approach that many organizations turn to is CRM. CRM is not a new concept; commercial businesses have sought to implement these practices for years (Chalmeta, 2006:1015).

Several definitions of CRM exist throughout the literature. Representative of the most common includes (Chalmeta, 2006:1015), who defines CRM as "a customer-focused business strategy that dynamically integrates sales, marketing and customer care service in order to create and add value for the company and its customers", or (Harej and

Horvat, 2000:108) who equate CRM to customer care, and define CRM as “a customer service that seeks to acquire new customers, provides superior customer satisfaction and builds customer loyalty”. The fundamental premise behind CRM is to gain knowledge and understanding of the customer which leads to better customer service and customer retention. While implementation is much more complex, the end goal is the same, and that is customer satisfaction.

AFMC’s Initiatives to Date

“Through Elog21, the Air Force has embarked on one of the most significant changes in sustainment support to the warfighter” (USAF PSCM Brochure, 2007:1). A key component of the transformational initiative Elog21 is Purchasing and Supply Chain Management (PSCM). PCSM seeks to “integrate purchasing and supply functions into a single end-to-end process that spans the Air Force supply system” (USAF PSCM Brochure, 2007:1). Initiated in 2001, PCSM seeks to reduce costs and improve performance within headquarters AFMC and the three Air Logistics Centers. As demonstrated in figure 1 below, CRM is one of the key pillars of PCSM.

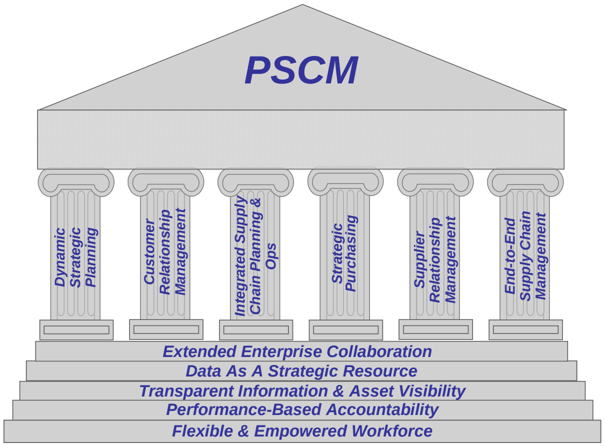
PSCM
Dynamic Strategic Planning
Customer Relationship Management
Integrated Supply Chain Planning & Ops
Strategic Purchasing
Supplier Relationship Management
End-to-End Supply Chain Management
Extended Enterprise Collaboration
Data As A Strategic Resource
Transparent Information & Asset Visibility
Performance-Based Accountability
Flexible & Empowered Workforce

Figure 1. PSCM Vision, Goals, and Pillars (USAF PSCM Brochure)

AFMC differs from the typical commercial application of CRM in that customer retention is not the ultimate goal of AFMC. AFMC is the sole provider of unique services to its customers, and customers have no other options but to utilize AFMC for those unique services. However, CRM and the implementation thereof, still carries many benefits and may prove to be very beneficial to military applications. As part of a larger initiative under the implementation of ECSS, “CRM ensures that this new process is accessible to, and acts in direct support of the military customer. As a customer-centric strategy, supported by ECSS, it represents a shift in thinking from AFMC’s traditional focus on ‘product’ towards customer, cost, communications and convenience (Green, 2006:1).

As part of the CRM initiative under PCSM, AFMC assigned Warner Robbins Air Logistics Center (WR ALC) as a site to test two customer service processes, managing customer relationships/collaboration, and managing inquires/providing support. “In order to do this, a CRM test Service Center was established to specifically validate the following (Sullivan, 2006:30-31).

1. Confirm CRM processes provide value at reduced cost
2. Determine customers
3. Determine if resource plans support performance targets
4. Document test results and lessons learned for command-wide deployment plan
5. Monitor acceptance and results

The C-130 airframe was chosen as the weapon system to evaluate due to the following features: C-130 is most representative of all weapon systems and spans all ALCs, C-130 is widely deployed, and had a manageable scope. Throughout the test, Customer Service

Center personnel collected data (to include a customer satisfaction survey) and captured lessons learned (Sullivan, 2006:30-31). Additionally, one of the most telling "lessons learned" from the outbrief was that "we should have invested in base-lining the current state of customer service" (Sullivan, 2006:30-31). This statement establishes the main focus and purpose of this research effort between AFMC and the Air Force Institute of Technology (AFIT). Additionally, an article by (Harej and Horvat, 2000) reinforces this notion that an organization should attempt to gain a better understanding of its customers prior to implementing CRM initiatives. The article describes the fundamental, yet necessary steps concerning successful CRM implementation, and describes four phases to consider when implementing CRM: initiation phase, process definition phase, introduction phase, and operation phase. The initiation phase describes processes that an organization should consider early in the implementation of CRM. "The current state of the organization should be evaluated – which processes are already in use, how well are they structured, are there any customer-centric processes already defined, how well does the organization knows its customers, and is the organization receiving any feed-back from them" (Harej and Horvat, 2000, 109). A well-designed survey can benchmark the "current state" of AFMC and determine how well it currently "knows its customers". As the Air Force looks for new and improved ways of doing business, AFMC can contribute significantly to this effort by capitalizing on the potential benefits that a properly implemented CRM model can provide.

Practices of Award-Winning, Customer-Focused Organizations

A good place to begin when examining award-winning, customer-focused organizations is by looking at the awards themselves. Perhaps the best and well known examples of such awards in the United States are the Malcolm Baldrige National Quality Award (MBNQA) and the President's Quality Award (PQA). "The Baldrige Award is given by the President of the United States to businesses—manufacturing and service, small and large—and to education, health care and nonprofit organizations that apply and are judged to be outstanding in seven areas: leadership; strategic planning; customer and market focus; measurement, analysis, and knowledge management; human resource focus; process management; and results" (MBNQA FAQs, 2007). Organizations are evaluated based on these seven categories. Category three is "customer and market focus", and evaluates several aspects of customer service as listed below:

> 1. How do you identify customers, customer groups, and market segments? How do you determine which customers, customer groups, and market segments to pursue for current and future products and services? How do you include customers of competitors and other potential customers and markets in this determination?
>
> 2. How do you use the voice of the customer to determine key customer requirements, needs, and changing expectations (including product and service features) and their relative importance to customers' purchasing or relationship decisions? How do your listening methods vary for different customers, customer groups, or market segments? How do you use relevant information and feedback from current and former customers, including marketing and sales information, customer loyalty and retention data, customer referrals, win/loss analysis, and complaint data for purposes of planning products and services, marketing, making work system and work process improvements, and developing new business opportunities?
>
> 3. How do you use voice-of-the-customer information and feedback to become more customer-focused, to better satisfy customer needs and desires, and to identify opportunities for innovation?
>
> 4. How do you keep your customer and market listening and learning methods current with business needs and directions, including changes in your marketplace? (Baldrige National Quality Program, 2007)

Similar to the MBNQA is the PQA. The PQA is “designed to recognize federal organizations that have documented high-performance management systems and approaches”. (President's quality award program, 2007). The PQA is very similar to the MBNQA, however the PQA is only awarded to federal organizations. Likewise, the criteria are very similar. The following represents the criteria for evaluating a federal organization based on customer satisfaction.

> 1. How do you determine or target customers, customer groups, and/or market/ mission-related segments? How do you consider customers of competitors and other potential customers and/or markets in this determination?
>
> 2. How do you listen and learn, and use the analysis of data and information to determine key requirements and drivers of purchase decisions for current, former, and potential customers? If determination methods differ for different customers and/or customer groups, include the key differences.
>
> 3. How do you determine and/or project key product/service features and their relative importance/value to customers for purposes of current and future marketing, product planning, and other business developments, as appropriate? How do you use relevant information from current and former customers, including marketing/sales information, customer retention, won/lost analysis, and complaints, in this determination?
>
> 4. How do you keep your listening and learning methods, and keep them current with business needs and directions? (PQA, 2001)

These criteria can serve as a good starting point for organizations seeking to implement customer relationship improvement initiatives.

Finding award winning organizations in the area of customer satisfaction is not difficult. One can look toward the recipients of these prestigious awards, as mentioned above, such as the MBNQA and the PQA that recognize leading companies for customer service efforts. However, determining commonalities among these organizations is not as easy to accomplish. A study conducted by Hodgkiss and Casipit sought to capture these commonalities as well as the differences among several award winning organizations. The comparisons were based on three areas: commitment to satisfaction, satisfaction measurement programs, and actual measurement tools used. The research focused solely on winners of the MBNQA and PQA. The companies analyzed were AT&T Universal Card Services (UCS), Federal Express, The Ritz-Carlton Hotel Company, Arnold Engineering Development Center, Cherry Point Naval Aviation Depot and Aeronautical Systems Center. The Authors discovered several similarities of note that existed between these customer-focused organizations. As a result of their studies, Hodgkiss and Casipit discovered the following commonalities among award winning organizations:

> 1. All organizations had developed a program to measure customer needs and expectations.
>
> 2. Top management of all of the organizations recognize the importance of the customer satisfaction program to their mission and are thus committed to the program, all had corporate buy-in or a general acceptance among the organization's employees concerning customer satisfaction.
>
> 3. Most organizations shared information concerning customer satisfaction throughout the organization and in all cases top management was informed of customer satisfaction information.
>
> 4. A majority of the organizations have a formalized procedure for measuring customer satisfaction data to drive continuous improvement.
>
> 5. A majority of the organizations empower employees to satisfy the customer.
>
> 6. A majority of the organizations have a formalized training program for customer contact employees.
>
> 7. All organizations developed their own customer satisfaction measures and methods to suit their organization's needs.

> 8. All organizations use a mix of methods to measure customer satisfaction. In addition, all organizations use one or more forms of surveys. (Hodgkiss and Casipit, 1994:4.18-4.29)

Other findings of note from the Hodgkiss and Casipit study were the non-existence of a linkage between customer satisfaction and performance appraisals in all military organizations; however, many of the public organizations had a direct link between performance appraisals and customer satisfaction. A thorough examination of the criteria used for the MBNQA and the PQA to evaluate companies, as well as the insight gained from the Hodgkiss and Casipit study serve as fundamental guidelines to consider when undergoing any customer service initiative.

Customer Satisfaction Defined

In an effort to define customer satisfaction, let us begin by examining some common definitions throughout the literature: In their book entitled, "*Customer Satisfaction*" by Hanan and Karp, customer satisfaction is simply defined as the "value that has been added to the bottom line of the customer" (Hanan and Karp, 1989:XII). ISO 9000 standard defines "customer satisfaction" as a "customers' perception of the degree to which the customer's requirements have been fulfilled" (ISO 9000, 2005). Customer satisfaction defined throughout the literature has a definite common theme; that is a satisfied customer would do repeat business with the providing organization.

A customer can receive satisfaction from an organization through several different channels, whether it is a service provided, a product purchased, a relationship established, or a value received in any form from the contributing organization. One could argue that customer satisfaction is the most important competitive advantage that an organization can have; therefore, customer satisfaction should be the primary focus of all organizations.

Because this research is focused on measuring whether the ALCs are meeting or exceeding customer's expectations, based on the criteria that AFMC's A4 Logistics division has established, customer satisfaction for the purpose of this research is defined as: "a service provided, a product purchased, a relationship established, or a value received in any form from the contributing organization that meets or exceeds the customer's needs and expectations, and results in a desire on behalf of the customer to seek repeat business with the providing organization, should the need arise".

Why Measure Customer Satisfaction?

There are numerous research studies demonstrating the importance of customer satisfaction in today's market place: "Customer satisfaction is a key and valued outcome of good marketing practice" (Malthouse and others, 2004:232); The primary focus of your company's operation should be on having uniformly excellent customer service" (Johnson, 2007:40); "The payback to the organization that is driven by a customer needs strategy is significant; Both management and employees benefit by improved work environment, increased self-worth, value to the organization and increased job security, benefits and financial rewards" (Aubrey, 1989:2). Among the empirical studies conducted to attest to the importance of measuring and obtaining customer satisfaction one could turn to the following: "firms that achieve high customer satisfaction also enjoy superior economic returns" (Anderson, Fornell, Lehmann, 1994:63); "Customer satisfaction is directly related to retention" (Anderson and Sullivan, 1993); Customer retention leads to the security of future revenues (Fornell, 1992); and reduces the chances that a customer will leave if quality declines (Anderson and Sullivan, 1993); Increasing customer satisfaction reduces cost associated with defective goods and services (Anderson, Fornell, and Rust, 1997).

Gauging by the vast amount of literature that has transpired, the sheer number of marketing and customer satisfaction research firms that are available for hire, as well as the number of organizations that are or have moved to a customer-focused business perspective, the importance of measuring customer satisfaction is obvious. “The fundamental reason customer satisfaction is important to your organization is because it allows your organization to stay in business” (Deviney, 1998). To most organizations that provides a good or service, attaining customer satisfaction is the ultimate goal. Without customer satisfaction most organizations will not remain competitive and will eventually seize to exist.

Customer Satisfaction Measurement Methods

Many methods exist to measure and capture a customer’s satisfaction: telephone studies, direct mailings, facsimile, personal interviews, and customer focus groups are among the most common. Each method presents its own advantages and disadvantages; however, “the advent of electronic mail (e-mail) and the Internet provides researchers with a new avenue for data collection; one that can negate many disadvantages associated with traditional survey methods” (Griffis, Golsby, and Cooper, 2003). Web-based surveys can result in a higher response rate, faster response times, and can provide the same results at a lower cost (Griffis, Golsby, and Cooper, 2003). Alternative, but perhaps more costly methods include in-person interviews. Additional methods to consider, although less direct, are complaint handling systems, market share analysis, and performance based measures. With the many alternatives that exist, an organization should not be limited to only one measurement method. By considering multiple measurement methods an organization can overcome many of the shortfalls that are associated with single measurements.

How Often to measure Customer Satisfaction

While there is no concrete answer to the question of how often to measure customer satisfaction, there does exist in the literature general guidelines to consider when determining measurement frequency. Hanan and Karp in a book entitled *Customer Satisfaction*, describe two "factors" that influence how often an organization should measure customer satisfaction. According to the authors, the "newer you are, the more frequently you will need to evaluate how well you are satisfying your customers" (Hanan and Karp, 1989:101). For a newer organization customer satisfaction must be monitored very closely considering that the slightest customer dissatisfaction could potentially have very negative results for an organization. Likewise, well-established organizations can afford slight "aberrations" in customer satisfaction in the short term. The second factor mentioned that should be considered is the type of business that you are in. According to the authors, "If your customers make daily decisions about your products or services and yesterday's dissatisfaction can have an immediate impact on today's sales, you will have to measure more frequently than a business whose sales cycle takes longer" (Hanan and Karp, 1989:101-102). Additionally, organizations must consider how often it changes customers and the organizations need to maintain current data regarding the satisfaction of its customers. According to Dr. Rick Johnson, founder of CEO strategist LLC, a firm specializing in leadership and the creation of competitive advantage in wholesale distribution, an organization "can only realistically conduct comprehensive surveys annually, aside from the cost of collecting the information, your customers will typically balk at more frequent requests" (Johnson, 2007:41). Inevitably, as competition continues to increase, organizations will want a better perspective on customer satisfaction and will labor to maintain accurate and current information in this area.

Summary

This chapter reviewed relevant literature associated with customer satisfaction measurements in an effort to develop an understanding of customer satisfaction prior to developing a measurement instrument for Air Force Material Command (AFMC). This literature review introduced a broad overview of CRM and AFMC's initiatives to date to measure customer satisfaction as a component of CRM. This literature review then defined "customer satisfaction", followed by an examination of the practices of award winning customer focused organizations. Finally, this literature review established the necessity to measure customer satisfaction and to analyze current customer satisfaction measurement methods; and examined some general guidelines for how often to measure "customer satisfaction". Together, this chapter formed the foundation for the decision to use a survey methodology to identify AFMC's external customer needs, and to measure its current satisfaction levels.

III. Methodology

Chapter Overview

A description of the methodology used to conduct this research is provided in this chapter. It begins with an overview of the population and sample used, followed by the development of an instrument utilized to measure customer satisfaction of the population. Data collection procedures followed by data analysis are then delineated.

Population and Sample

ALC customer information was derived from Structured Query Language (SQL) databases at Ogden Air Force Base in Utah and Tinker Air Force Base in Oklahoma. Currently the customer support centers at each of these locations maintain databases on their customers along with their contact information. Mr. Tommy Justice at AFMC's A4 division provided the required databases in order to compile customer information. At present Mobility Air Force (MAF) customers are "expected" to call the Logistics Support Centers (LSC) at Scott Air Force Base in Illinois and Combat Air Forces (CAF) are expected to call the LSC at Langley Air Force Base in Virginia. If the LSC does not have the information or expertise to handle the call, the call is then forwarded to the ALC. The available customer databases provide contact information in the form of electronic mail addresses for all customers that contact the ALCs; therefore, the research was conducted on the entire population which eliminated the requirements of a sample selection. Additionally, customer segmentation was provided by introducing questions into the survey that allowed the researcher to differentiate among various customers of the ALCs. In a previous research effort conducted by Sullivan (2006), Sullivan attempted to segment customers based on a research effort conducted by Captain Damelsa White, She segmented customers based on recency, frequency, and location; however, Sullivan was not able to specifically utilize White's data due to the lack of customer identification that was provided by AFMC. To overcome this, Sullivan incorporated questions into the survey which allowed him to segment customers based on the same model of recency, frequency, and location. In order to make relative comparisons between surveys, the same segmentation model was utilized for this research and the questions concerning customer segmentation were retained in the survey.

Survey Instrument

The survey instrument utilized for this research is based on a previous research effort conducted by Sullivan (2006). Sullivan developed a survey instrument that was conducted in 2006 that provided an overall "foundation" from which to compare future CRM and customer satisfaction efforts. The survey conducted for this research utilized many of the same questions from the Sullivan (2006) research; however, some questions were reworked in order to "fine tune" the previous survey and add to functionality. The final survey can be found at VI. Appendix A: Web-Based Survey QuestionsKendall Survey (2008), and will be referred to throughout the remainder of this literature as the Kendall (2008) survey for readability purposes. By conducting a survey that was very similar to the previous survey conducted by Major Sullivan, this researcher was able to make comparisons between both surveys which allowed relative comparisons to be made which aided in answering the following investigative question:

4. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the data collected from the Sullivan

(2006) research survey and the data collected from the Kendall (2008) research survey?

This question is examined in detail in chapter IV of this research.

The original Sullivan (2006) survey was analyzed by AFMC, AFIT faculty, and the researcher to ensure that the survey captured the scope of the responsibilities of the ALCs. Minor changes were made to clarify certain areas of the survey; additionally, Sullivan had identified an area for improvement concerning respondents that were at deployed locations. Sullivan identified the following:

> Only 2% of respondents identified themselves as “deployed”, yet, 16% of respondents had answers on whether or not their deployed location supported the warfighting AOR. This inconsistency is being attributed to poor wording on the survey. A better way to ask the question would have been “If you answered yes to the previous question, then please indicate if your deployed location is supporting the warfighting AOR.” (Sullivan, 2006: 48)

The revised survey utilized for this research incorporated Sullivan’s recommendation. The minor changes referred to above can be quickly identified by comparing the original Sullivan survey from Sullivan (2006) to the survey contained in this research effort. The minor changes made primarily, if not exclusively, affected functionality of Sullivan’s survey and not content.

Data Collection Procedures

The data collection method for this research was a web-based survey due to the increased speed of this method, the databases provided by AFMC contained electronic mail addresses, better access to a larger population, and lower costs associated with web-surveys (Griffis, Golsby, and Cooper, 2003). AFMC Customer Service Center’s (CSCs) maintain databases to capture information on all customers to the ALCs. AFMC was able to provide contact information, specifically electronic mail addresses for all of the customers that contacted the ALCs from August 2006 to August 2007. Due to the previous research effort by Sullivan (2006), these dates captured the customers that AFMC was most interested in surveying. Additionally, this contact information included all customers, which essentially was the entire population. This eliminated the need for a sampling method and enabled parallel comparisons between this research and the research conducted by Sullivan (2006).

The survey utilized for this research effort was distributed to thirty-six hundred and seventy-one electronic mail addresses on 4 February 2008. A follow up e-mail requesting completion of the survey was sent on 11 February 2008 in an attempt to serve as a reminder to the survey focus population and encourage better participation. The survey ended on 15 February 2008.

Data Analysis

The purpose of this section of the research is to describe the method of data analysis utilized after the survey was conducted and the results were collected; additionally, this section describes the reasons for choosing these methods. Once a survey has been conducted, it is necessary to analyze and summarize the results. The results must be presentable and displayed in a manner that makes the results easy to utilize and understand. The primary methods of analysis and representation chosen for this research were one-way Analysis of Variances (ANOVA) tests, Independent two-sample T-test, and frequency distributions. The ANOVA is used to test for differences among three or more groups (Statistics Homepage, 2008) within a population. ANOVA analysis is appropriate whenever you want to compare the means of three groups; therefore, ANOVA was utilized to determine if a significant statistical difference existed between the ALCs for the Sullivan (2006) survey and the Kendall (2008) survey. Statistical comparisons of the means, for each question of the survey, were conducted by ALC utilizing the statistical software program, SPSS (Statistical Package for the Social Sciences). VII. Appendix B: Results of Statistical Analysis, includes the results of all statistical comparisons that were made for each question of the survey. The questions are presented by segment in the same manner as the survey was distributed. An F-value greater than one, with a respective significance value less than .1 (90% significance) assumed that a difference existed between the individual question means of each ALC. Conversely, an F-value less than one, with a respective significance value greater than .1 assumed that no difference existed between the means. The ANOVA tests were based on a significance level or an alpha of .1 giving a 90% confidence that the means where either equal or unequal. After analyzing the data at a 95% and a 90% significance level, the researcher determined that a 90% significance level gave the best results without excluding some differences and including menial differences. If the ANOVA test indicated that a statistical difference existed with an F-value greater than one, based on a significance level of 90%, a Tukey analysis was performed to determine which ALCs differed; the data were then presented utilizing frequency distributions to provide further analysis and usability of the results.

Additionally, independent sample T-tests were utilized to compare the Sullivan (2006) survey and the Kendall (2008) survey to determine if differences in the responses had transpired from the time of Sullivan’s research in 2006 to the conclusion of the data collection of this research. Likewise, a significance value less than .1 (90% significance) assumed that a difference existed between the Sullivan (2006) survey question and the Kendall (2008) survey question, and the data were then presented utilizing frequency distributions to provide further analysis and usability of the results. VII. Appendix B: Results of Statistical Analysis, contains the results of the independent sample T-test in its entirety.

Frequency distributions as a method of graphical representation of the data were chosen due to two main factors:

1. Precedence: In the previous survey conducted in 2006, Sullivan's primary means of analysis and presentation was the use of relatively simple and easy to understand histograms. Additionally, Sullivan's method of histogram presentation was based on initial CRM testing at Warner Robins where a test team gathered some preliminary results by conducting a four question survey (Sullivan, 2006) and presented those results by means of histograms.

2. Frequency distributions provide a useful way to graphically present the results of survey data allowing users to visually interpret the results (Archester, 1995:14).

Additionally, to make the data more useful, frequency distributions were conducted on all segments of the Kendall (2008) survey.

The following summarizes the analysis that was conducted:

1. Frequency distributions were presented for each segment of the Kendall (2008) survey to give graphical representation of all the data collected.

2. Analysis of Variance (ANOVA) tests were conducted on all survey questions to identify differences between ALCs for the Sullivan (2006) survey and the Kendall (2008) survey. If the difference was statistically significant with a confidence interval of 90%, frequency distributions were conducted to further present and highlight the differences.

3. Independent Sample T-tests were conducted on all survey questions to identify differences between the Sullivan (2006) survey and the Kendall (2008) survey. If the difference was statistically significant with a confidence interval of 90%,

frequency distributions were conducted to further present and highlight the differences.

Prior to conducting an ANOVA, the data should be analyzed to see if it meets two criteria in addition to being random and independent:

1. The distributions of the data are normal.
2. The data possess constant variance.

To ensure the results were not affected by these assumptions and wrong conclusions made, two tests were performed in addition to the ANOVA. A non-parametric Kruskal-Wallis test (compares group medians and is therefore very robust against non-normality) was conducted to ensure that the results were not affected by non-normality, and Welch's ANOVA tests (very robust against non-constant variance) were performed to ensure that the results were not affected by non-constant variance. In all comparisons, the Kruskal-Wallis and the Welch's ANOVA did not change the results or conflict with the one-way ANOVA tests; therefore, the researcher concluded that the ANOVA was sufficient to determine the differences, and only the ANOVA analysis was presented in this report. The comparisons that resulted in an F-value greater than one with a significance value less than .1 (for a 90% significance level) are presented in chapter IV for each respective segment.

IV. Results

Chapter Overview

The purpose of this chapter is to detail the results of the survey analysis. This chapter begins by describing the survey demographics followed by frequency distributions which provide a graphical representation, designed to present the results of the survey and how the ALCs performed based on the criteria selected by AFMC's A4 Logistics division, of the data collected from the Kendall (2008) survey. Details of the comparisons made by ALC utilizing data from the Sullivan (2006) survey are then presented, followed by comparisons by ALCs utilizing data from the Kendall (2008) survey. Lastly, a detailed comparison of the two surveys, Sullivan (2006) and Kendall (2008), is presented. If an individual failed to answer a portion of the survey or if the individual did not identify their respective ALC contacted, that response was not included in the analysis.

Survey Demographics

A total of thirty-six hundred and seventy-one surveys were distributed by electronic-mail and fifteen hundred and sixty were returned due to incorrect addresses, recipients being out of the office, and anti-spamming or anti-virus protocols. At the conclusion of the survey, three hundred and two responses were received and twenty-three responses were discarded due to incomplete responses. Additionally, eleven respondents indicated that the survey was not applicable to them. After accounting for all returns and incomplete responses the overall response rate was thirteen percent. No participants responded that they had problems or issues with the actual survey.

How did the ALCs perform based on the data collected from the Kendall (2008) survey?

The purpose of this section of the chapter is to present frequency distributions which provide a graphical representation, designed to convey the results of the survey and how the ALCs performed based on the criteria selected by AFMC's A4 Logistics division, based on the data collected from the Kendall (2008) survey. This section seeks to answer the following research investigative question:

1. How are the ALCs performing based on the data collected from the Kendall (2008) survey criteria that were developed by AFMC's A4 Logistics division?

The graphical representation of the frequency distributions for this section stands alone to present the results; however, highlights and a brief commentary are provided at the beginning of each segment.

Segment One Analysis

Segment one of the Kendall (2008) survey consisted of eight questions that covered frequency of usage and survey demographics. This segment was designed to segment customers by ALC, frequency of usage, length of usage, deployed status, duty Air Force specialty code/job series, and purpose of the call. The results indicated that the respondents were more long term customers; a majority of the respondents (82%) utilized the ALCs more than six months. Both the Sullivan (2006) survey and the Kendall (2008) survey was presented with the same problem with the number of deployed personnel responding to the survey; less than two percent of the respondents reported being at a deployed location. This could be contributed to the databases that were utilized to capture customer information such as was discussed in the limitations section of this research; additionally, this could be contributed to the turnover rate of deployed personnel. As mentioned, the electronic mail addresses were dated from June 2006 to June 2007. Given deployment lengths and turnover, the respondent's deployment status is likely to have changed between the time that the electronic email address was derived and the time that the survey was distributed. Lastly, fifty-six percent of the respondents worked in supply, and over fifty-six percent of the respondents called in support of a weapon system.

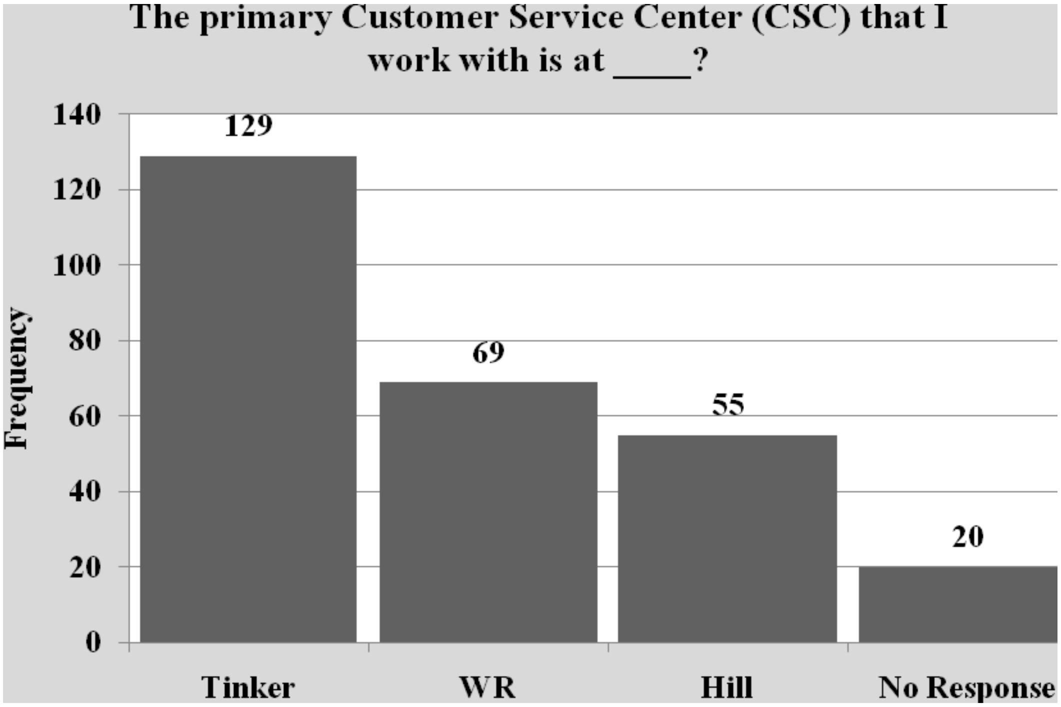

Figure 2 - Frequency Distribution of the Customer's Primary CSC.

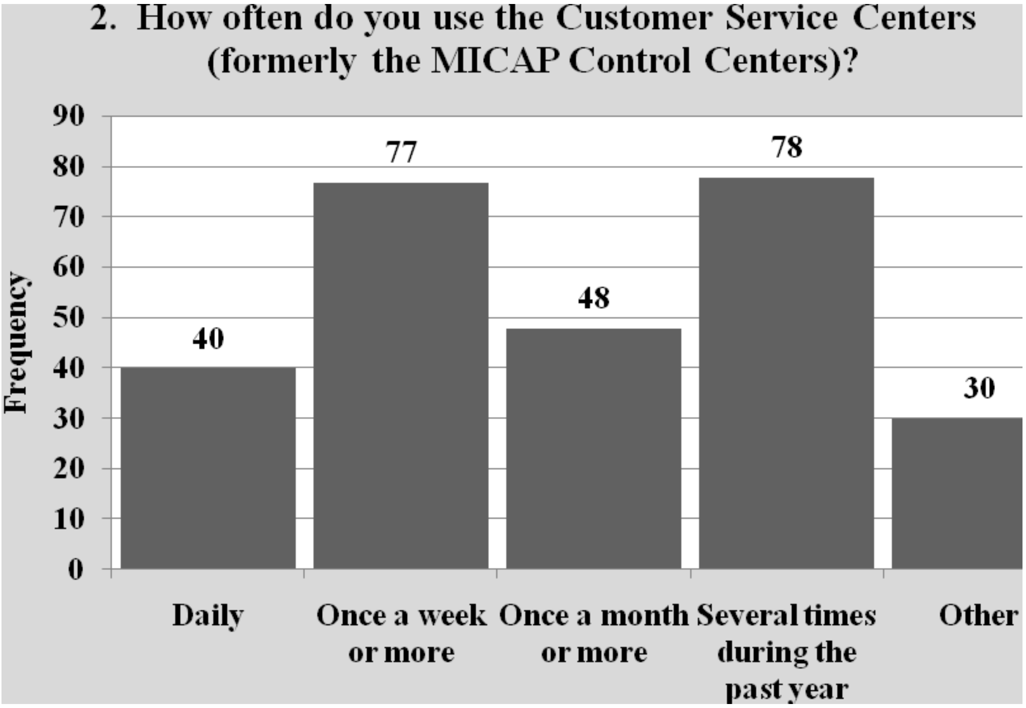

Figure 3 - Frequency Distribution of how often Customer Utilizes the CSC.

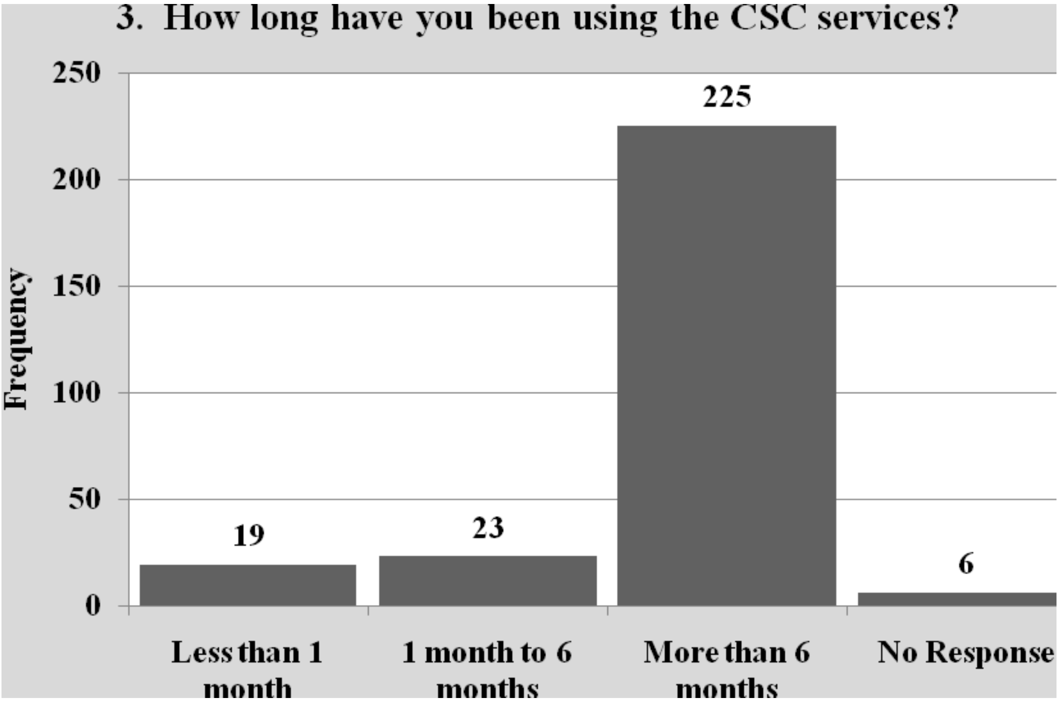

Figure 4 - Frequency Distribution: How Long Customer Has Utilized CSC Services

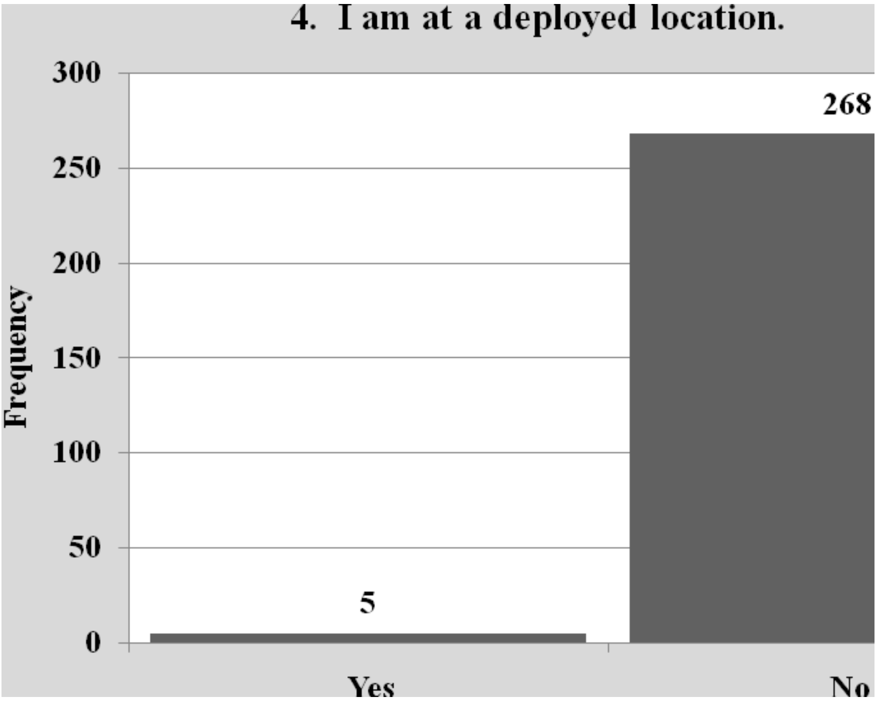

Figure 5 - Frequency Distribution of Customer's Deployed Status

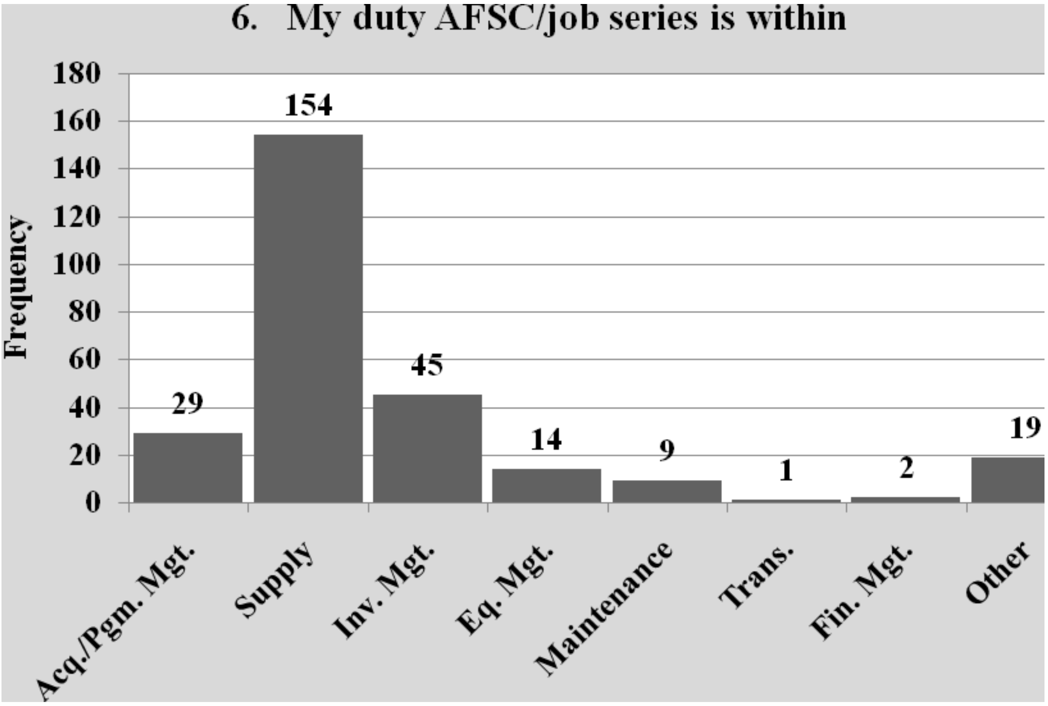

Figure 6 - Frequency Distribution of Customer's Duty AFSC/Job Series.

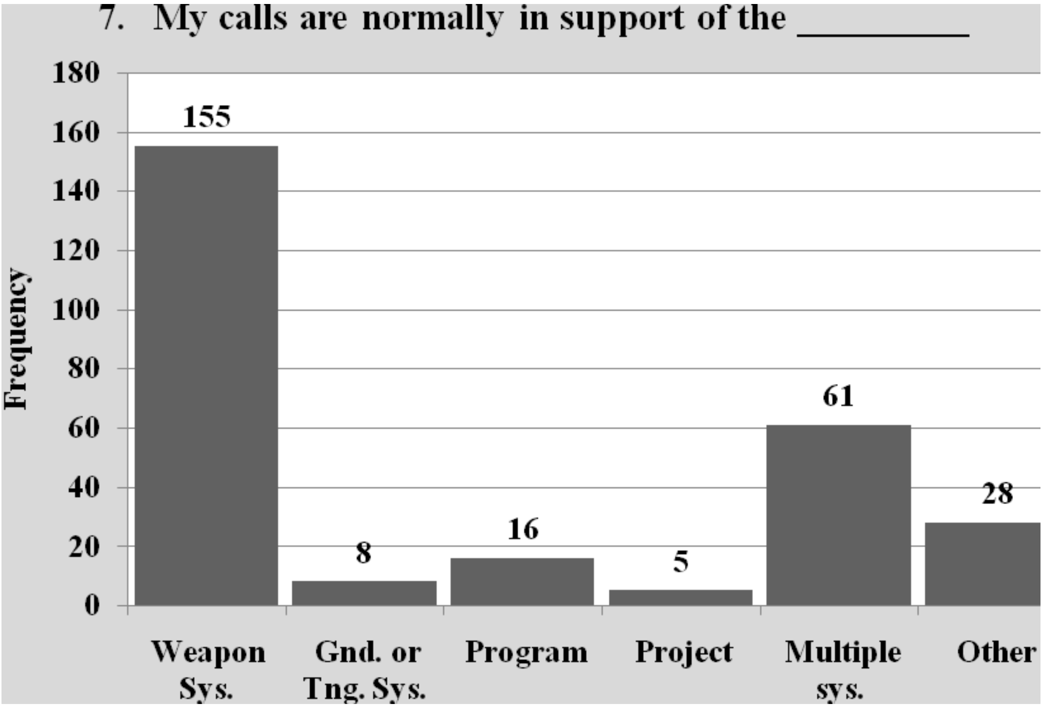

Figure 7 - Frequency Distribution of Customer's Call Support

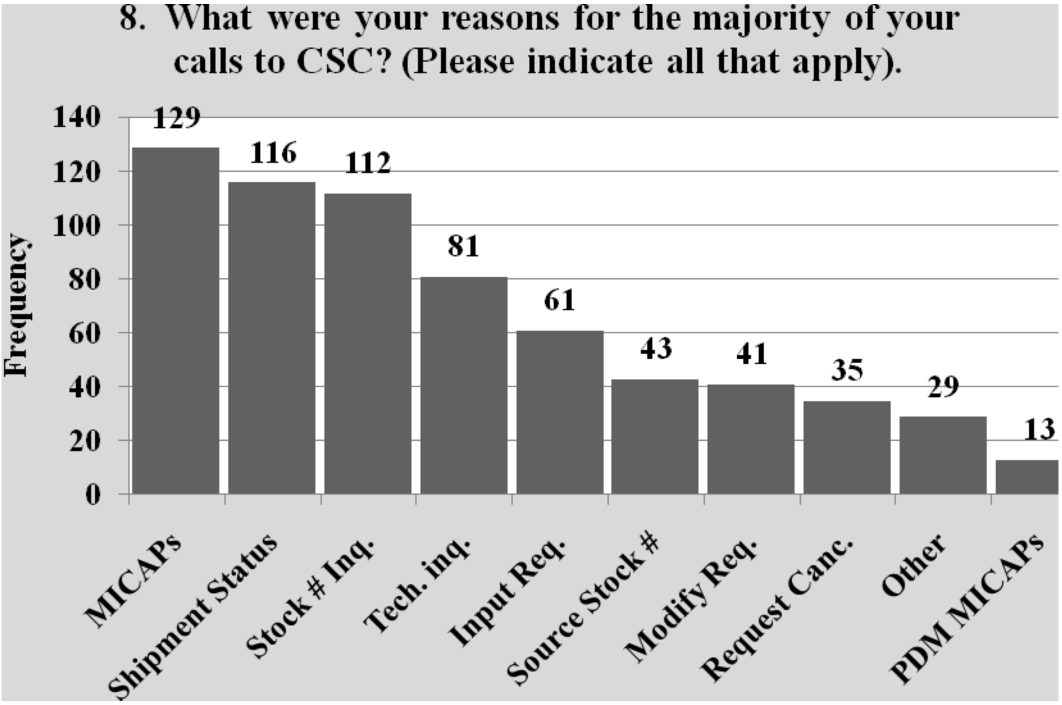

Figure 8 - Frequency Distribution of Reasons for the Customer's Call to CSC.

Segment Two Analysis

Segment two, of the Kendall (2008) survey, consisted of five questions covering hold time duration and the satisfaction of customers with the length of time they were on hold before reaching a Customer Service Center (CSC) agent. The responses received concerning this segment indicate that the CSC agents are handling calls in a timely manner which is acceptable to the CSC's customer. When examining question one, how long customers were on hold prior to speaking to a customer service representative during their most recent call, and question two, how long the customer was on hold on average, over eighty-seven percent were on hold less than three minutes during their most recent call and during all calls on average. Over seventy-seven percent agreed or strongly agreed that this was an acceptable amount of time to be on hold before speaking to the customer service representative. Finally nineteen percent of respondents hang up due to the amount of time it took before reaching a customer service representative.

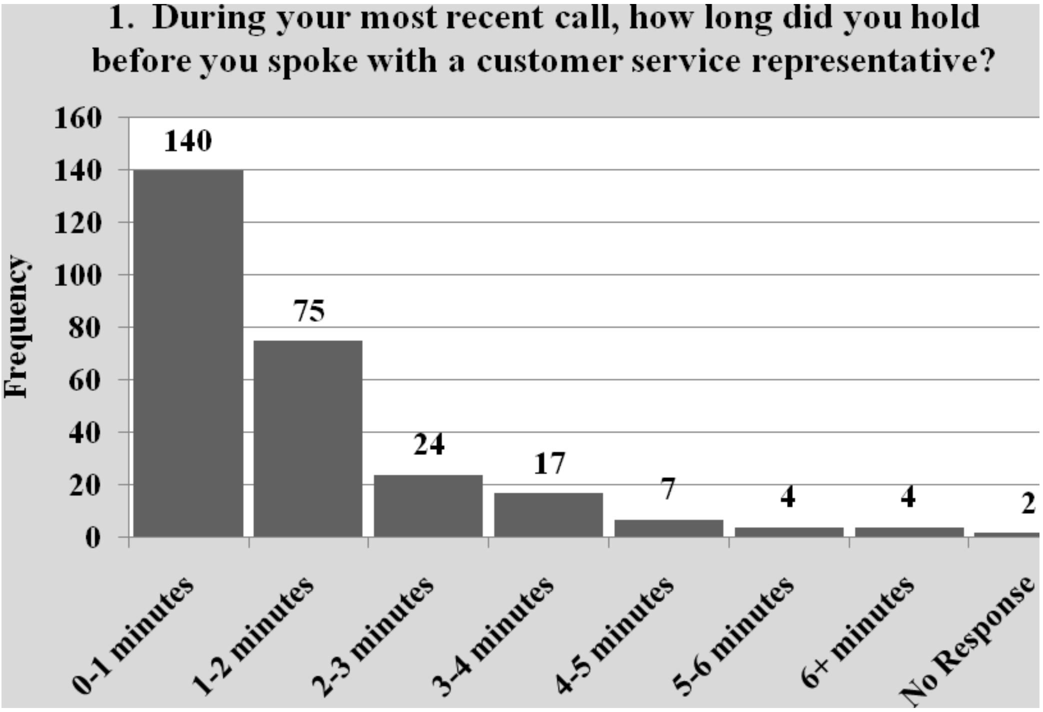

Figure 9 - Frequency Distribution: Customer's hold Time.

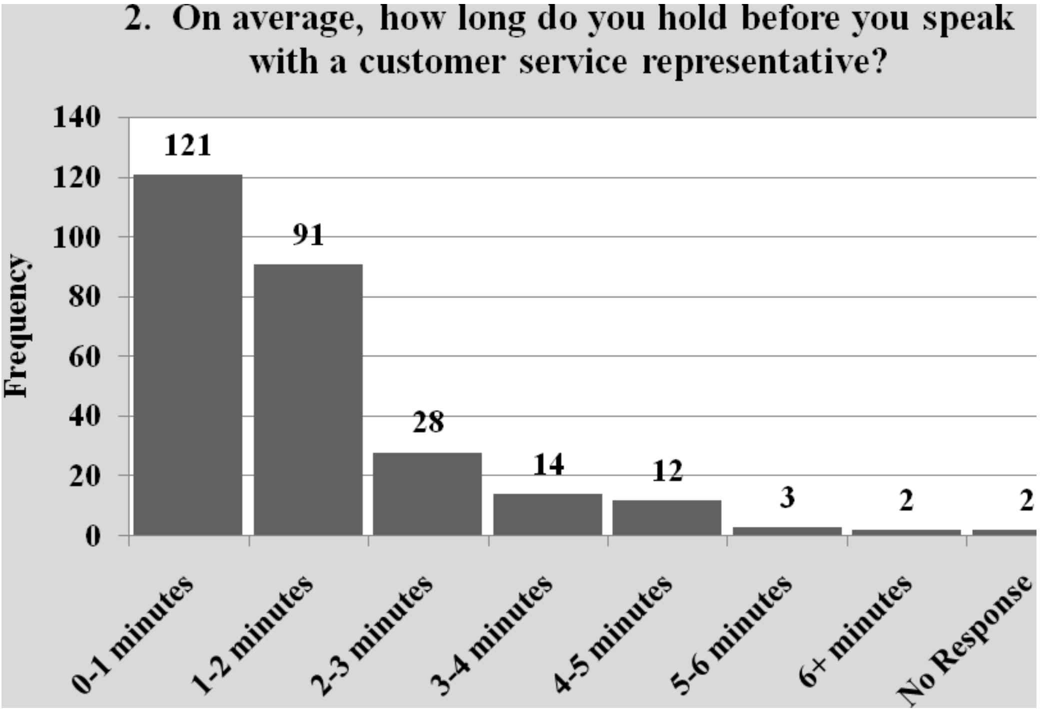

Figure 10 - Frequency Distribution: Average Customer hold time.

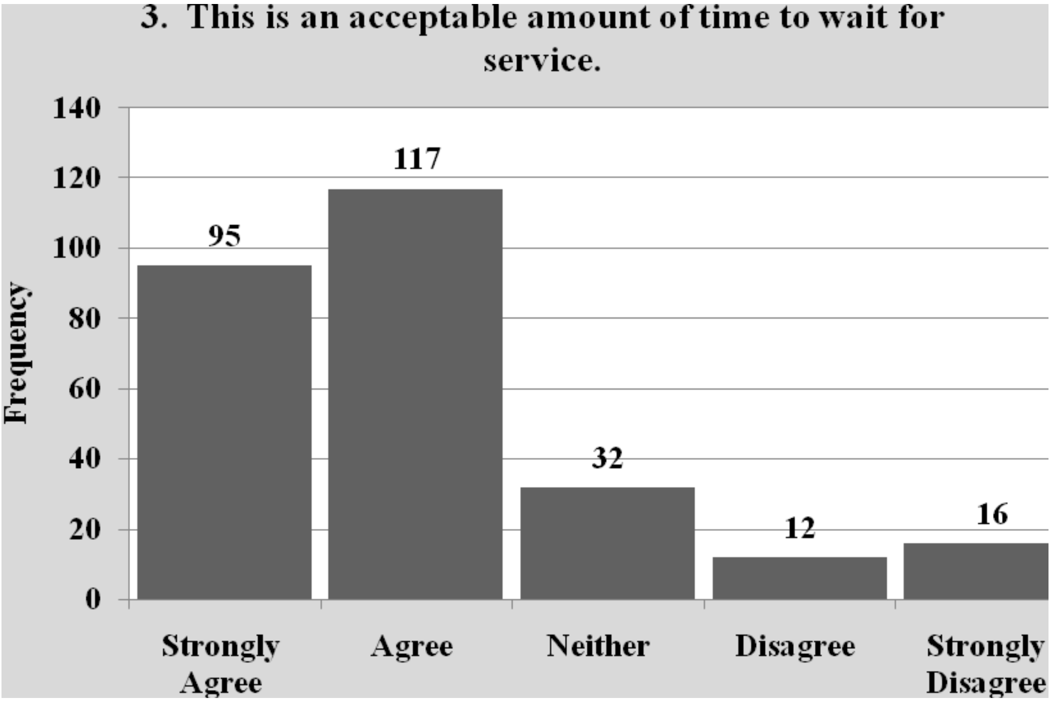

Figure 11 - Frequency Distribution of Acceptable Wait Times.

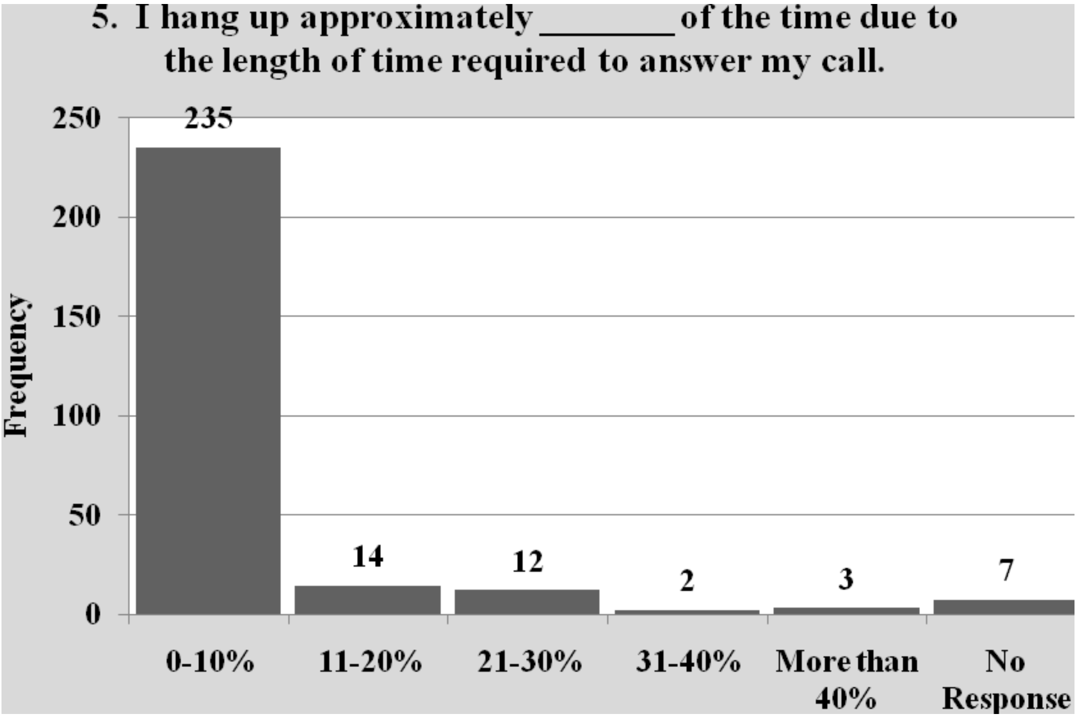

Figure 12 - Frequency Distribution of How Often Customer Hangs Up.

Segment Three Analysis

Segment three of the Kendall (2008) survey consisted of five question that covered call resolution parameters. Highlights of segment three includes: over ninety-four percent of the respondents indicated that the average length of time a customer was on the phone with a customer service representative was less than ten minutes. Eighty-three percent of the respondents agreed or strongly agreed that the customer service center answered their question in a timely manner and over seventy-six percent indicated that their issue was normally resolved with one phone call. Finally, over eighty-nine percent indicated that it was important that their issue be resolved with one phone call.

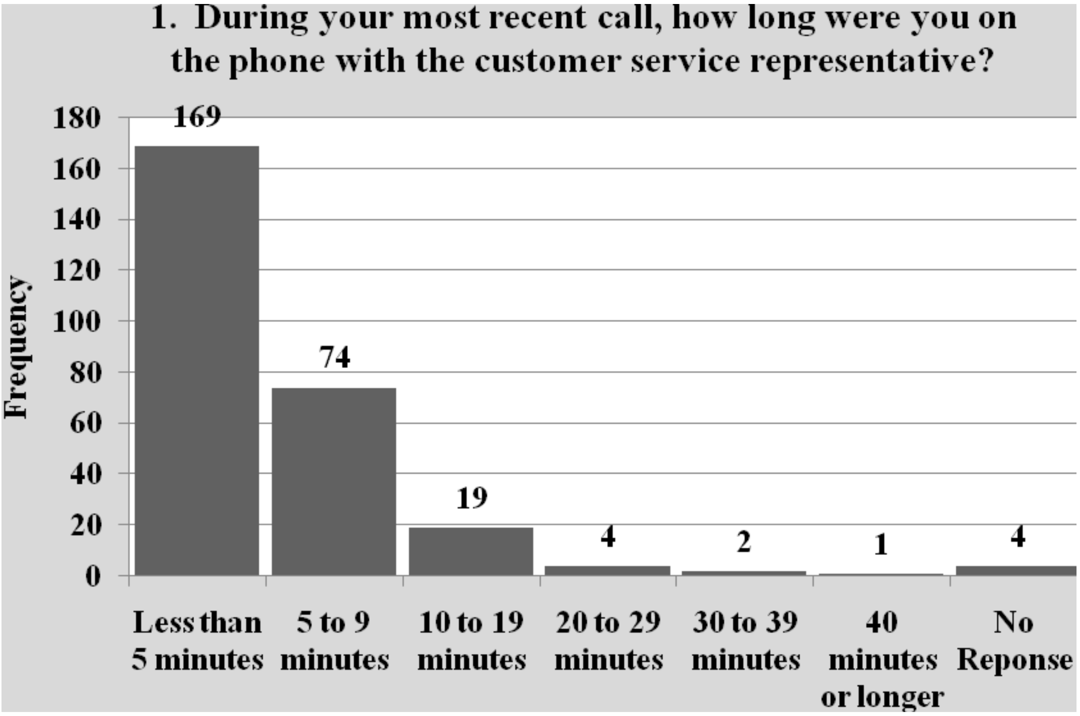

Figure 13 - Frequency Distribution: How Long Customer was on the Phone.

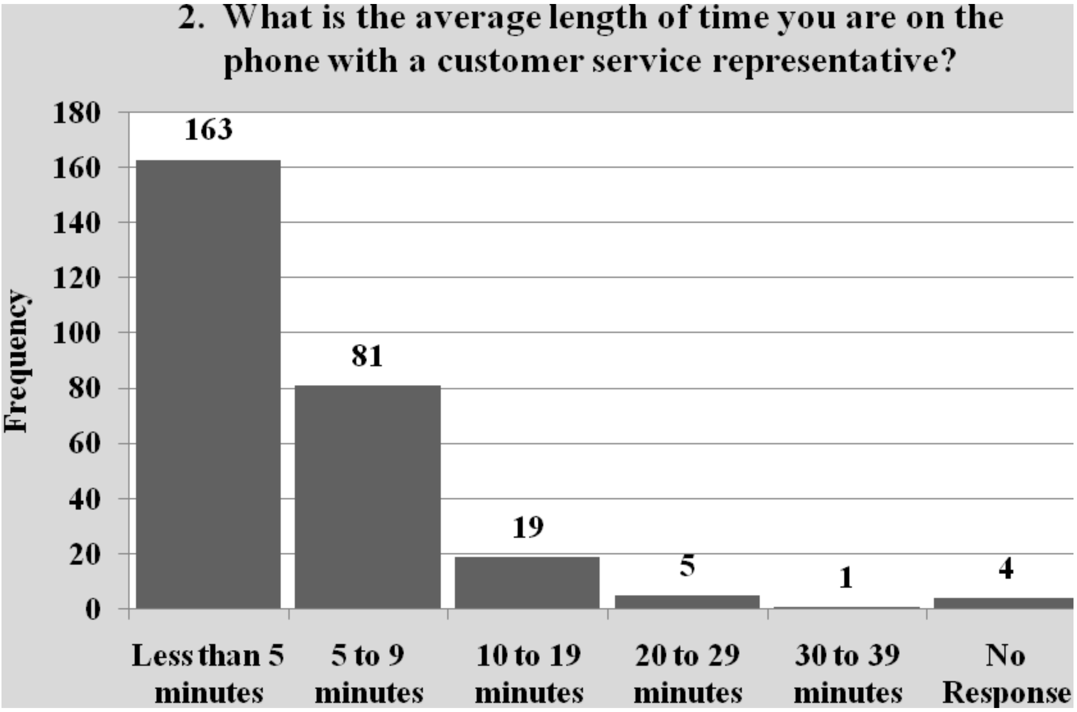

Figure 14 - Frequency Distribution: Average time Customer was on the Phone.

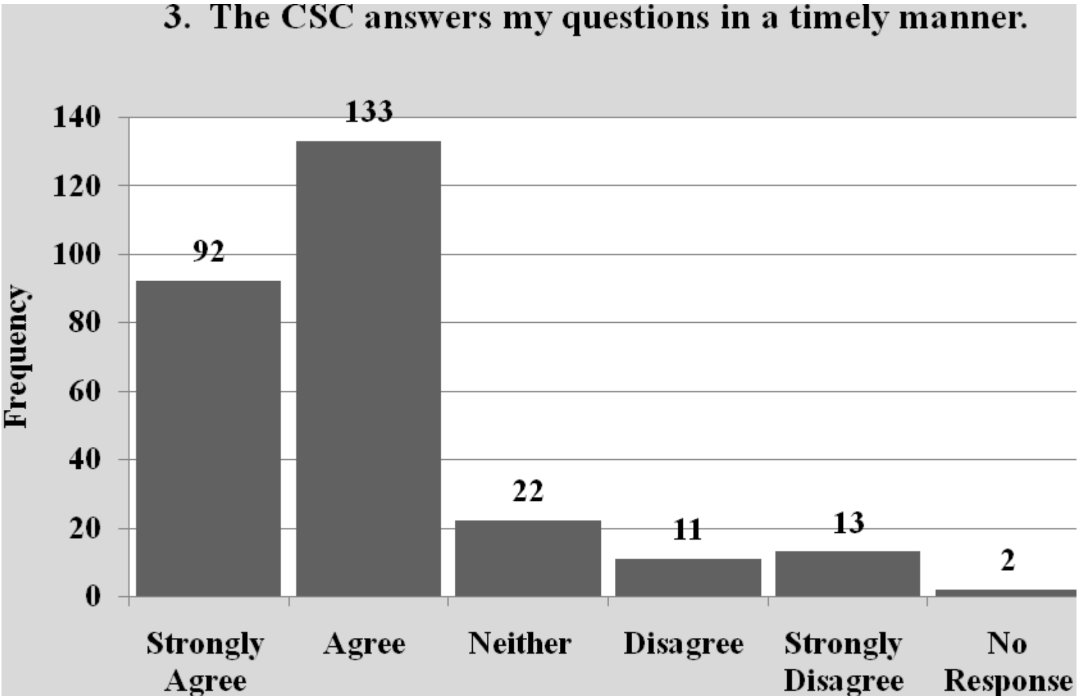

Figure 15 - Frequency Distribution of Timeliness of CSC Reps. Answer.

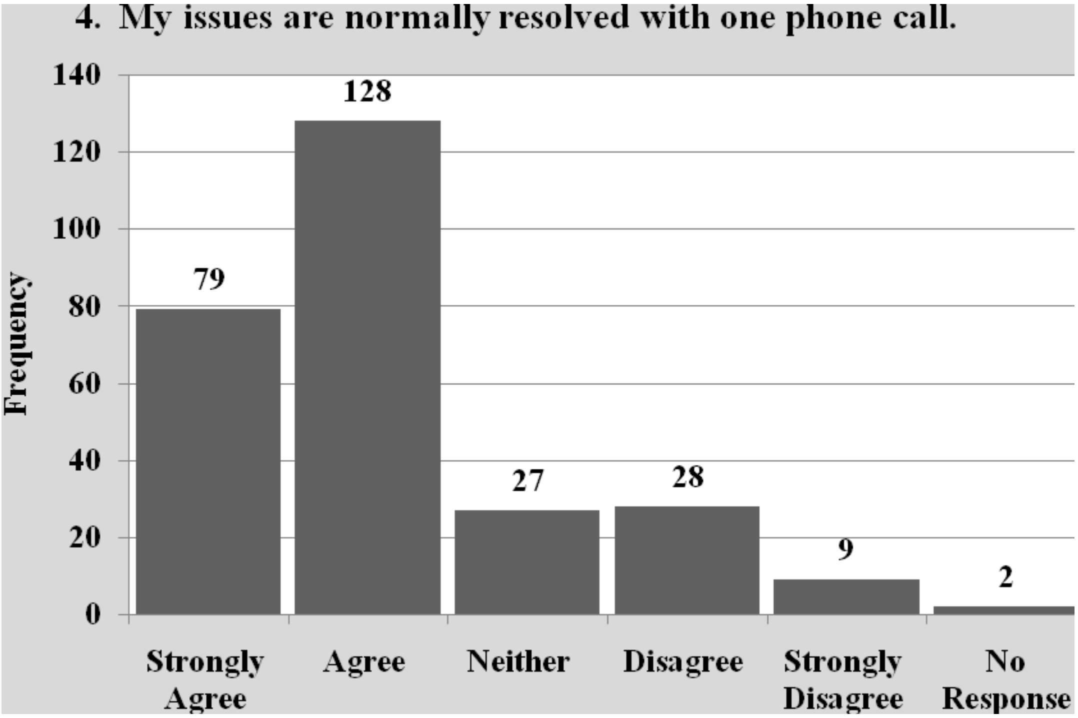

Figure 16 - Frequency Distribution: Number of Calls Required.

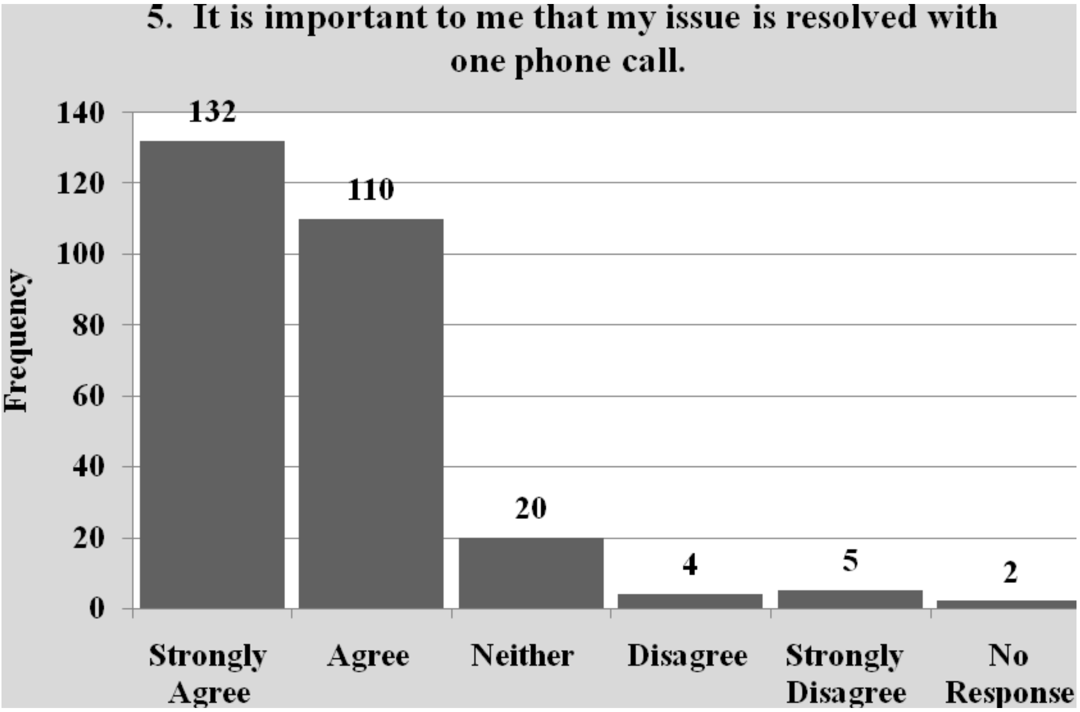

Figure 17 - Frequency Distribution: Importance of Resolution with One Call.

Segment Four Analysis

Segment four of the Kendall (2008) survey consisted of eleven questions based on the CSC's ability to manage inquiries and provide support (service level). Overall the customer's responses were consistently positive in this segment. Over eighty percent of the respondents agreed or strongly agreed that they were aware of the CSC services available to them, and that the CSC representatives were available at convenient times. Additionally, over eighty percent of the respondents agreed or strongly agreed that they were confident about the accuracy of the information provided by the CSC and that the CSC representatives have demonstrated the ability to address their questions/issues. Of note, over seventy percent of the respondents indicated that they were referred to another person more than twenty percent of the time.

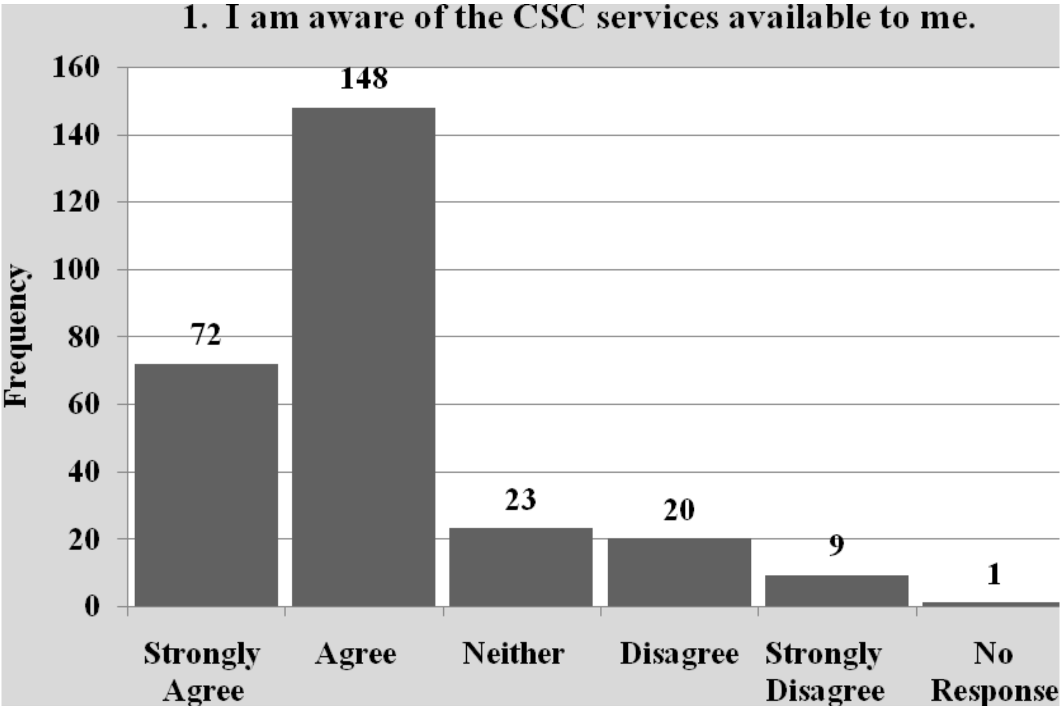

Figure 18 - Frequency Distribution of Customer's Awareness of CSC Services.

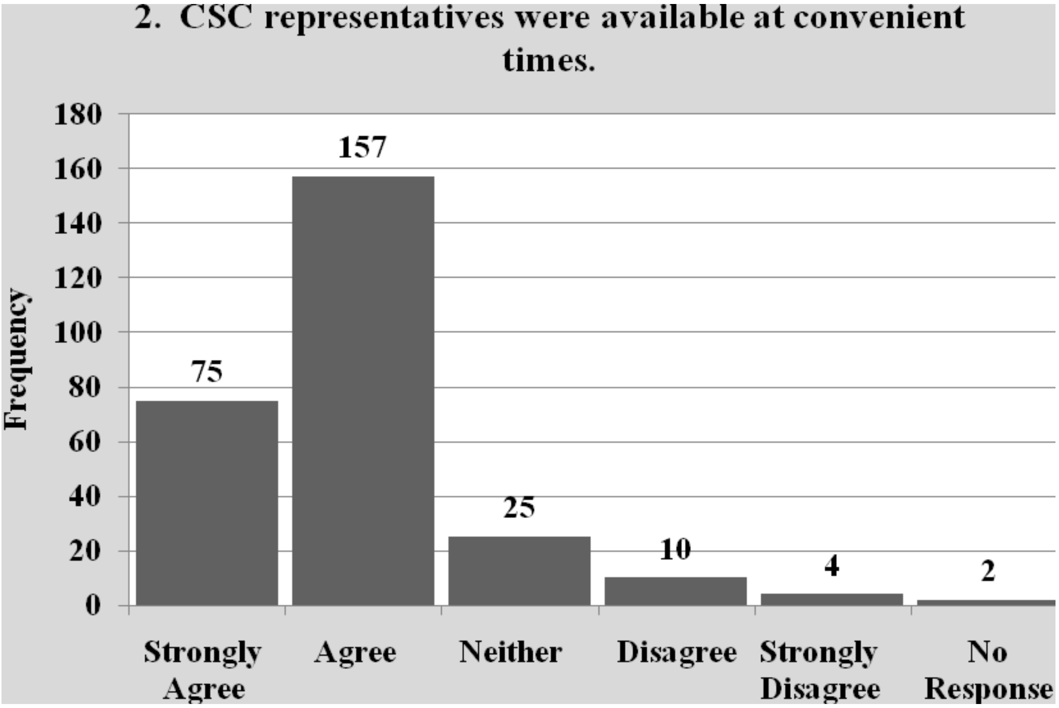

Figure 19 - Frequency Distribution of Convenience of CSC Rep. Availability.

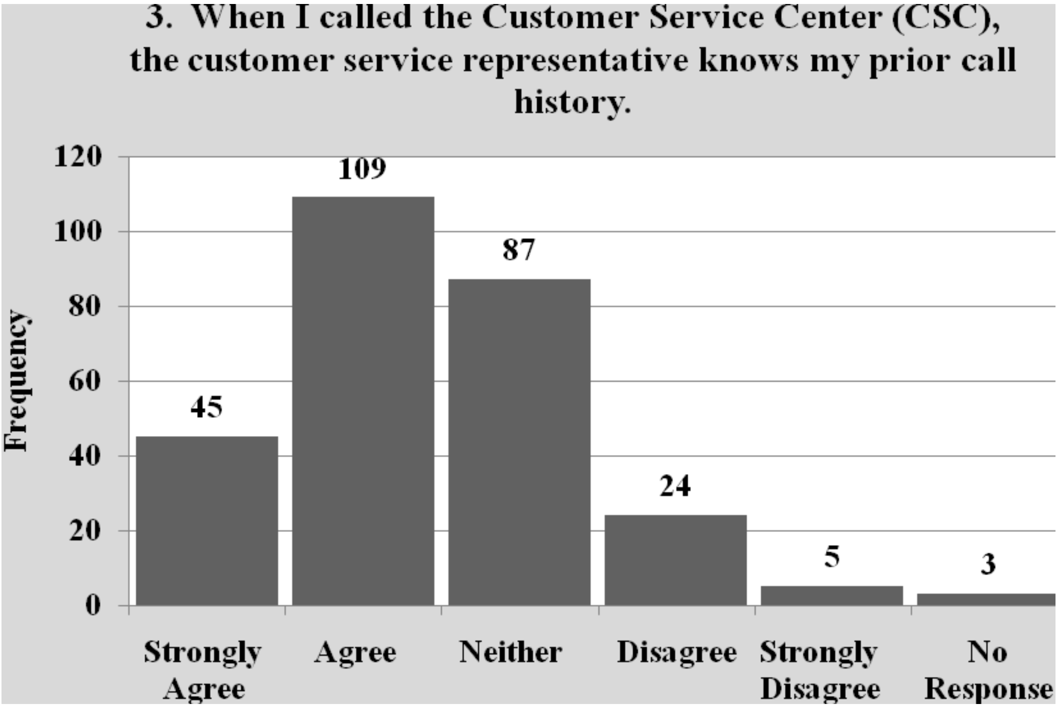

Figure 20 - Frequency Distribution of CSC's Knowledge of Customer's Call History.

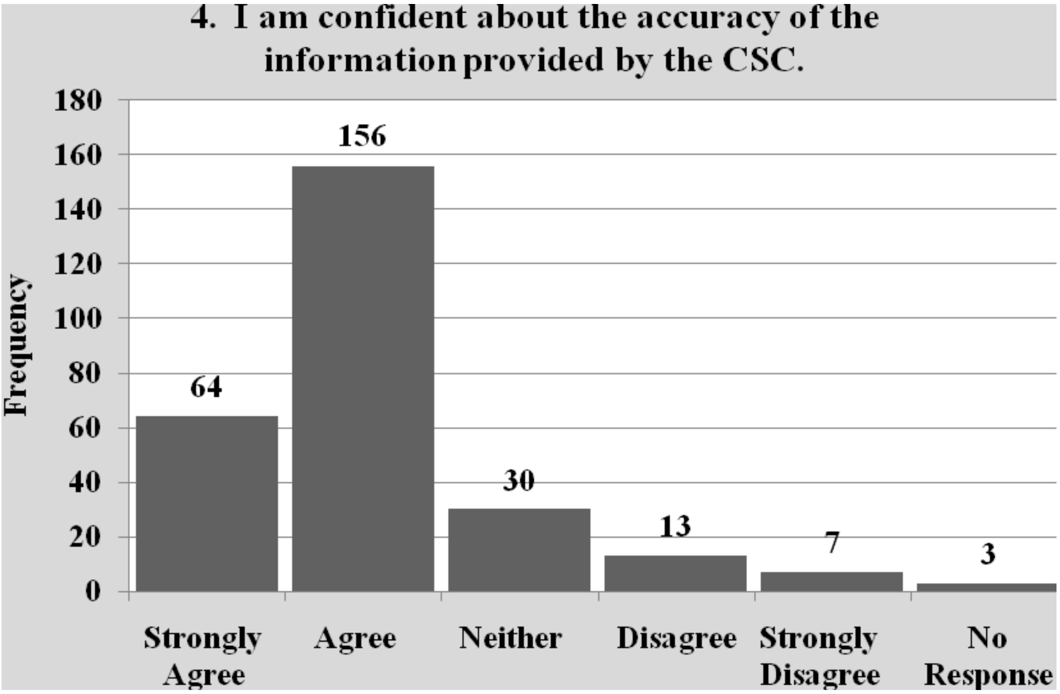

Figure 21 - Frequency Distribution of Accuracy of Information Provided by CSC.

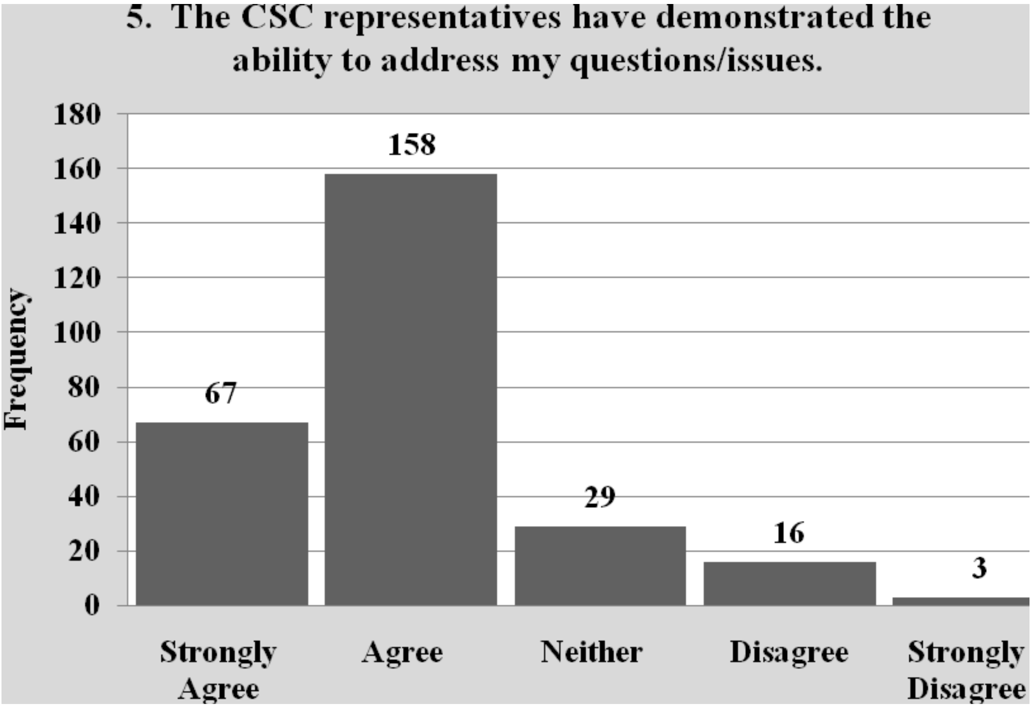

Figure 22 - Frequency Distribution: CSC's Ability to Address Questions/Issues.

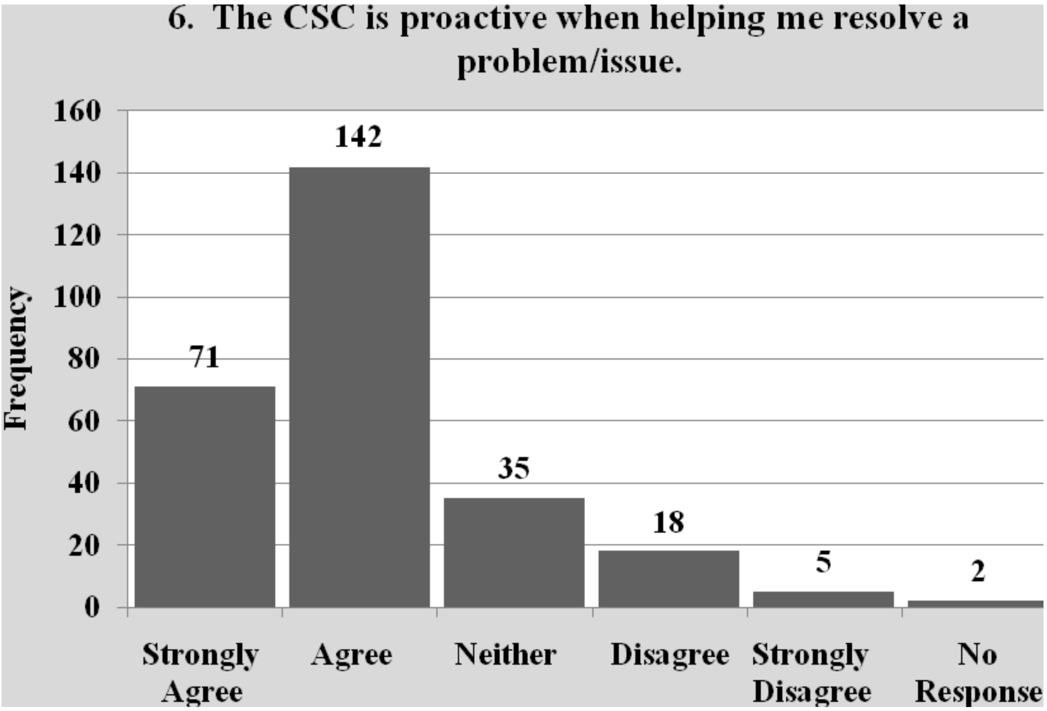

Figure 23 - Frequency Distribution: is the CSC Proactive.

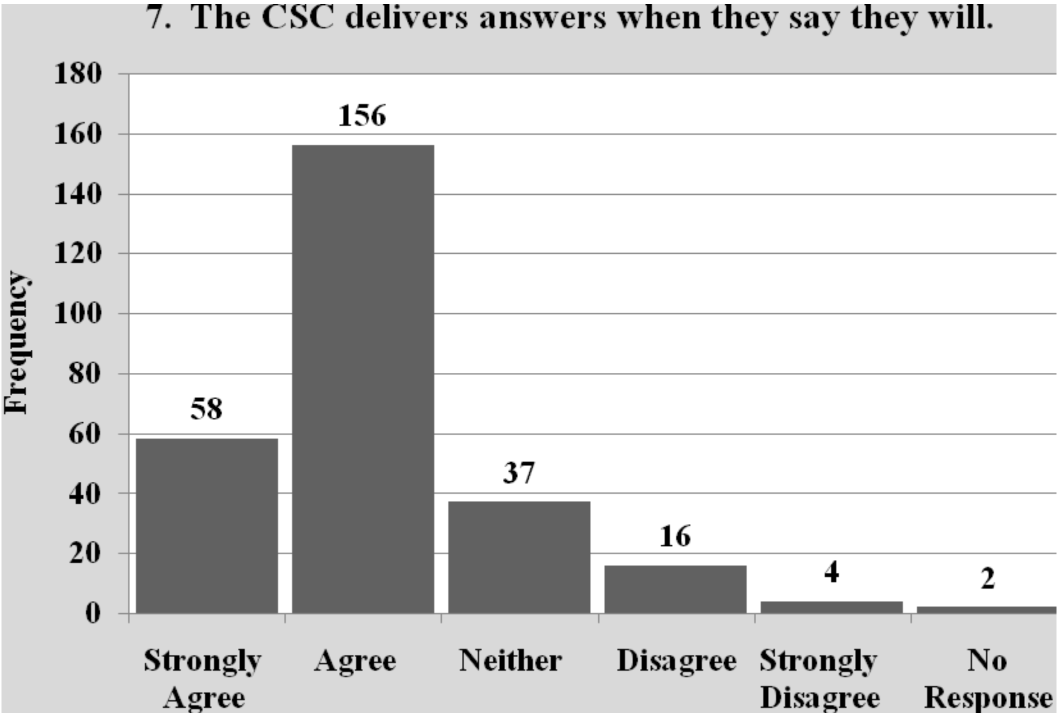

Figure 24 - Frequency Distribution: does CSC Deliver when they say they will.

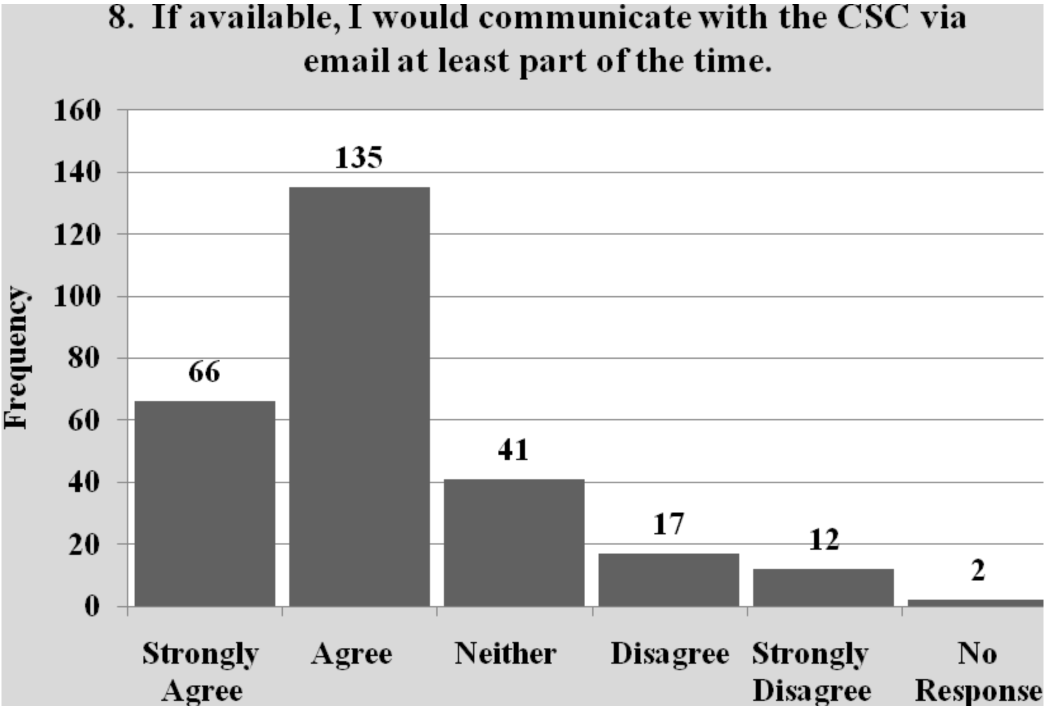

Figure 25 - Frequency Distribution: Customer's desire to communicate via E-mail.

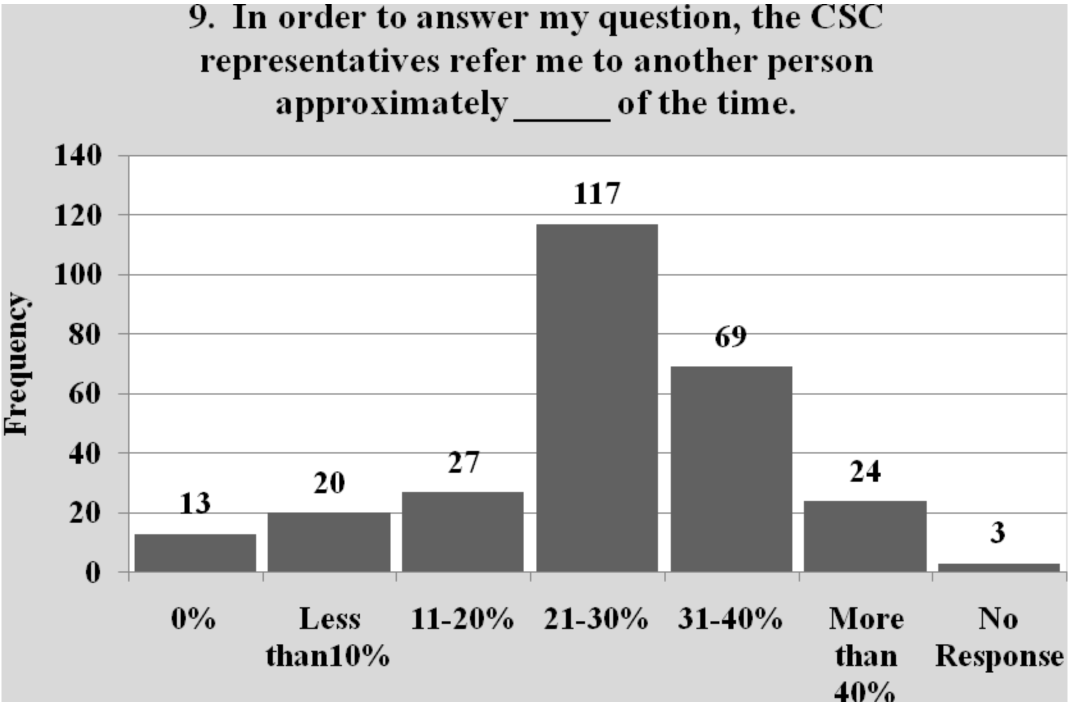

Figure 26 - Frequency Distribution: Customer is referred to another person.

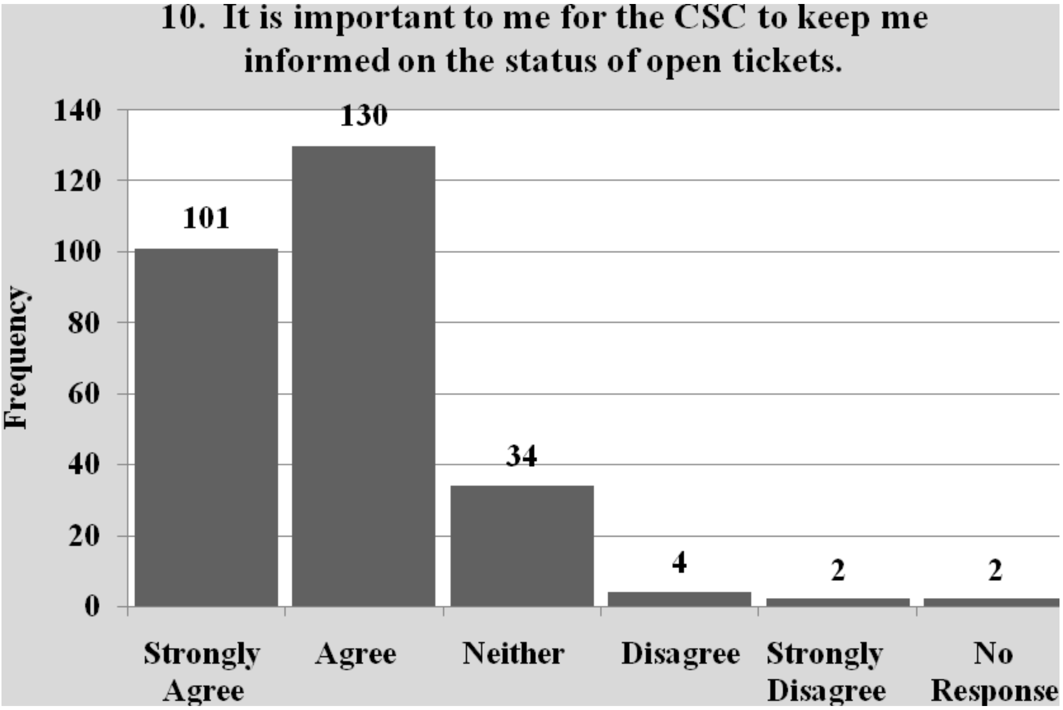

Figure 27 - Frequency Distribution: Importance of Status of Open Tickets.

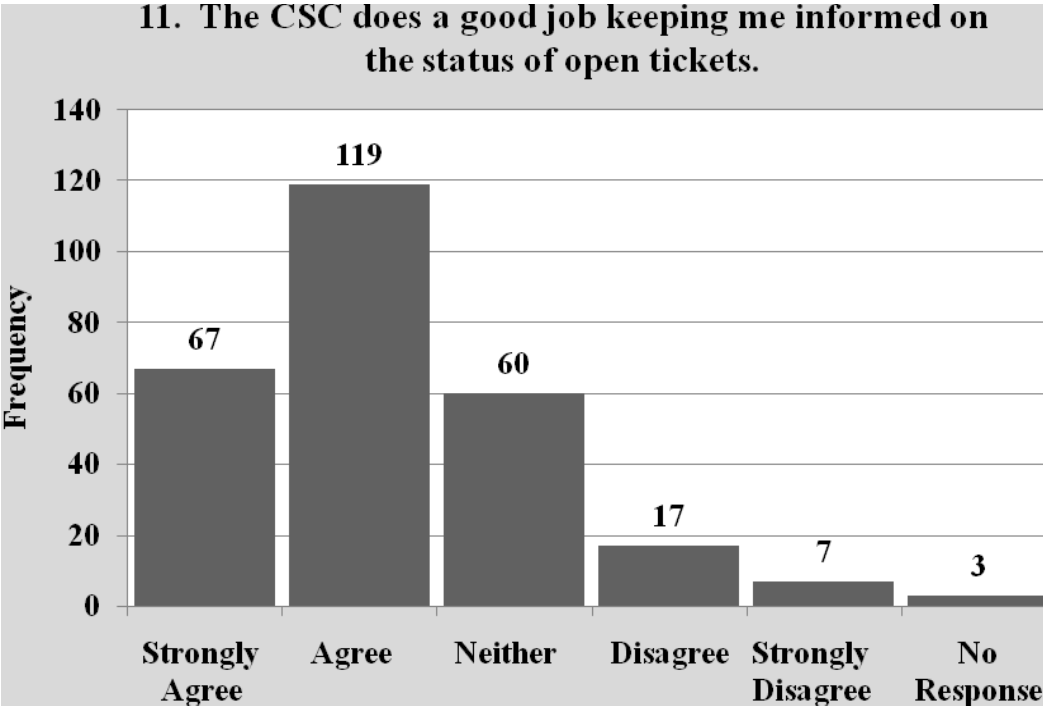

Figure 28 - Frequency Distribution: Customers Informed of Ticket Status.

Segment Five Analysis

Segment five of the Kendall (2008) survey consisted of five question focused on gauging the awareness of existing web services and the desire or drive to utilize those services. This segment indicates that customers of the CSCs would utilize web services to retrieve information and that those customers would find web services valuable. Over seventy-five percent of respondents indicated that if available, they would access information about CSC services using the Internet. Additionally, respondents indicated that the internet would be valuable to be able to track the status of a question via a web page, and they would like a web-based service to be provided.

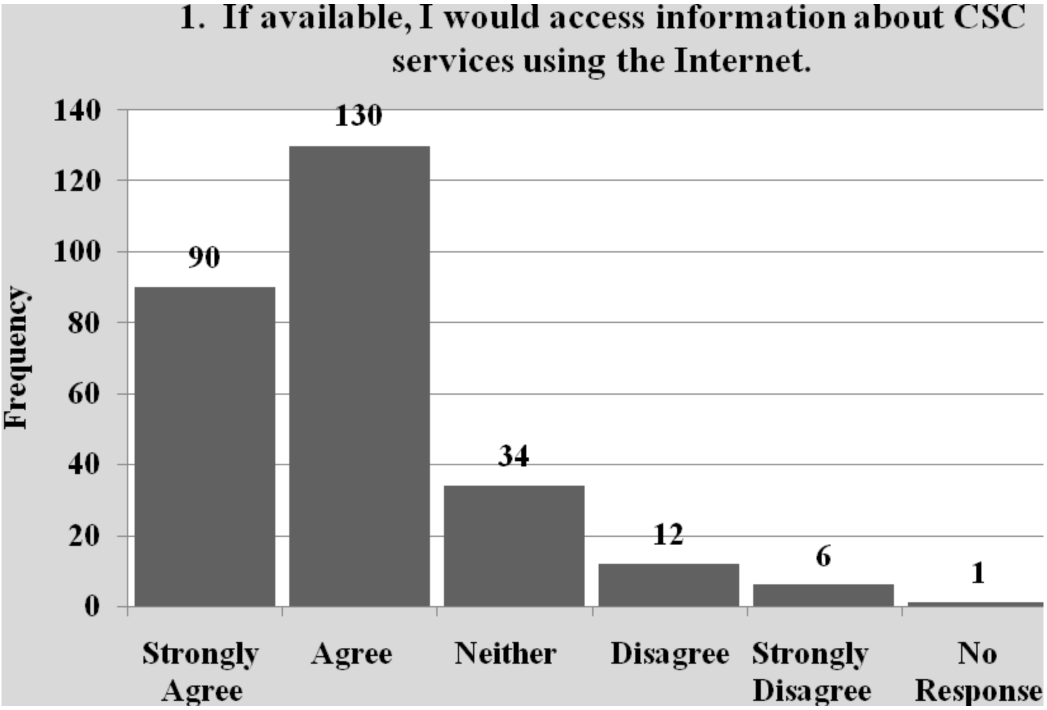

Figure 29 - Frequency Distribution: Customer would Utilize Internet for Services.

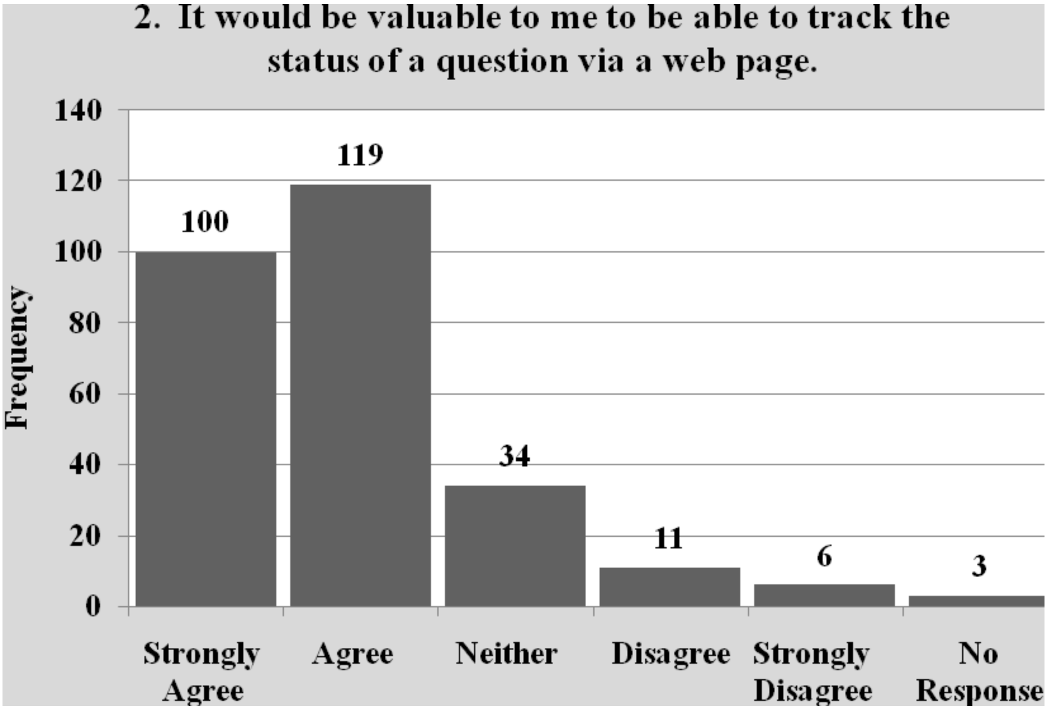

Figure 30 - Frequency Distribution: Value of Tracking Status via Web Page.

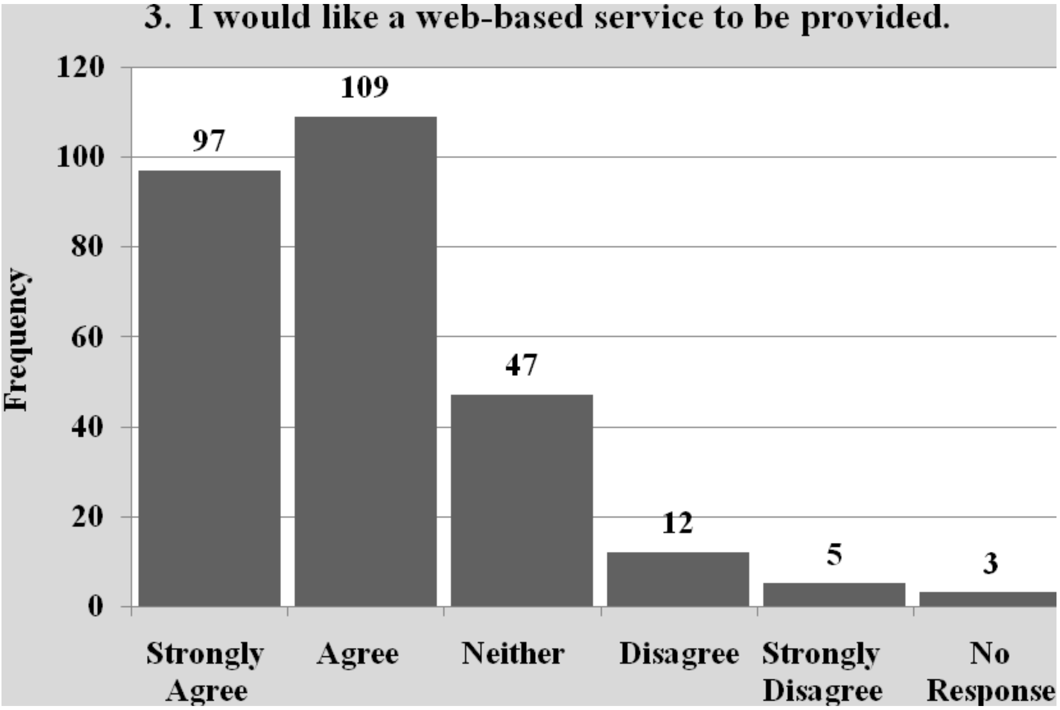

Figure 31 - Frequency Distribution: Customer would like Web-based Services.

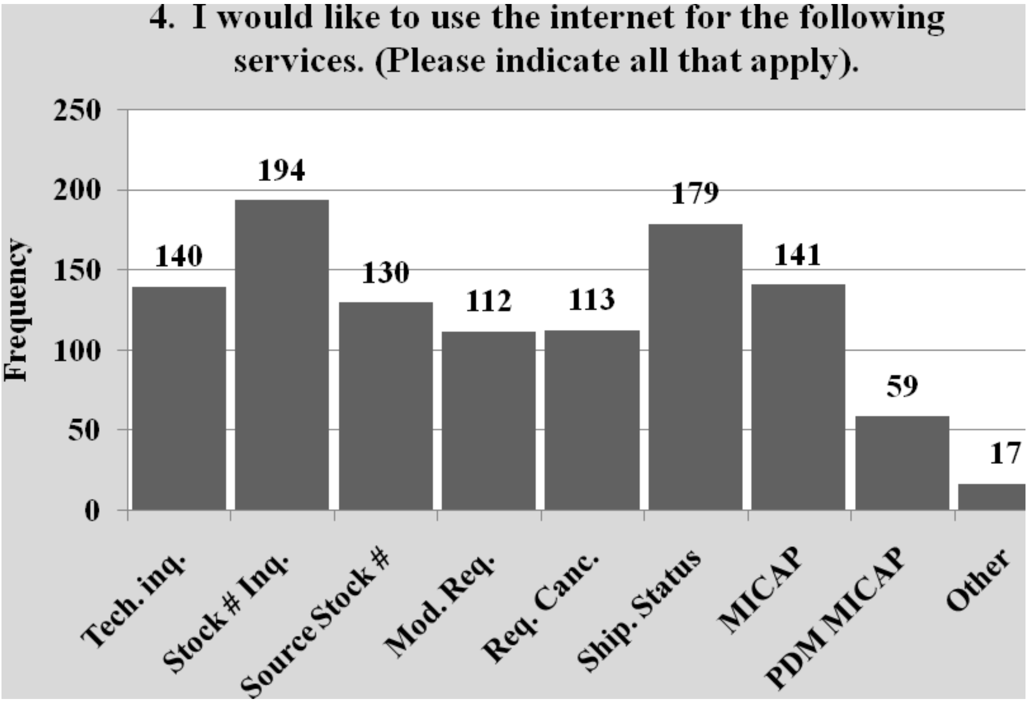

Figure 32 - Frequency Distribution: Why Customer would use Internet.

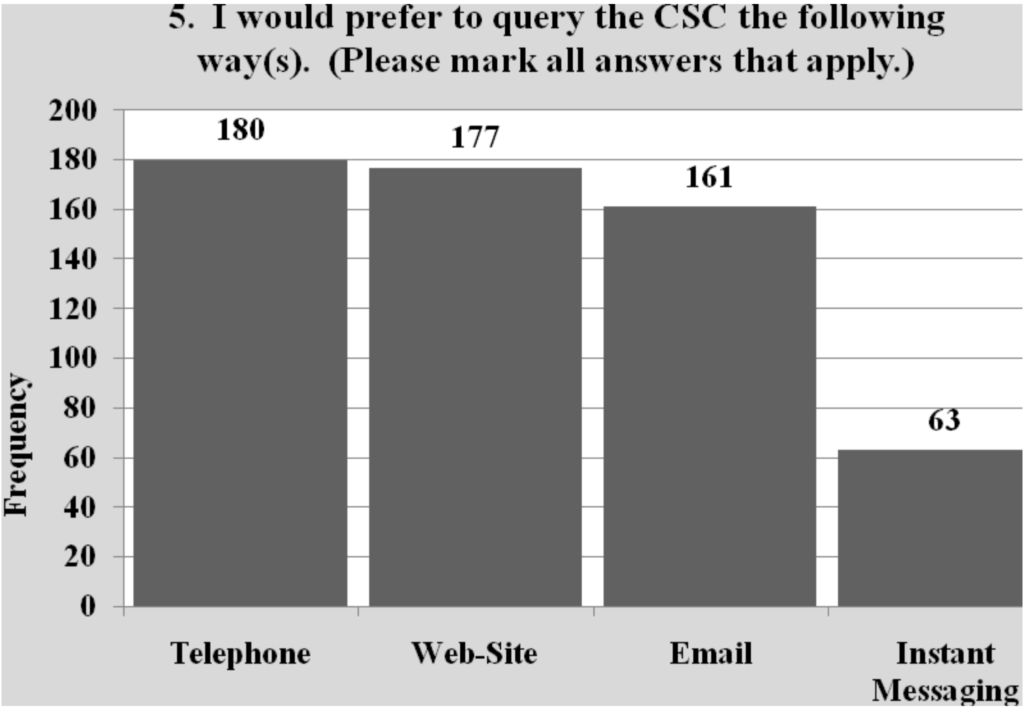

Figure 33 - Frequency Distribution: How Customer would prefer to query CSC.

Segment Six Analysis

Segment six of the Kendall (2008) survey consisted of seven questions dealing with customer's satisfaction level with the CSC representatives. The CSC representatives were rated very well in this segment, with over ninety-one percent of the survey participants "agreeing" or "strongly agreeing" that, in general, the CSC representatives were professional, helpful, and friendly. Additionally, over eighty-three percent "agreed" or "strongly agreed" that the CSC representatives understood their question/needs, understood the urgency of their request(s), and were knowledgeable.

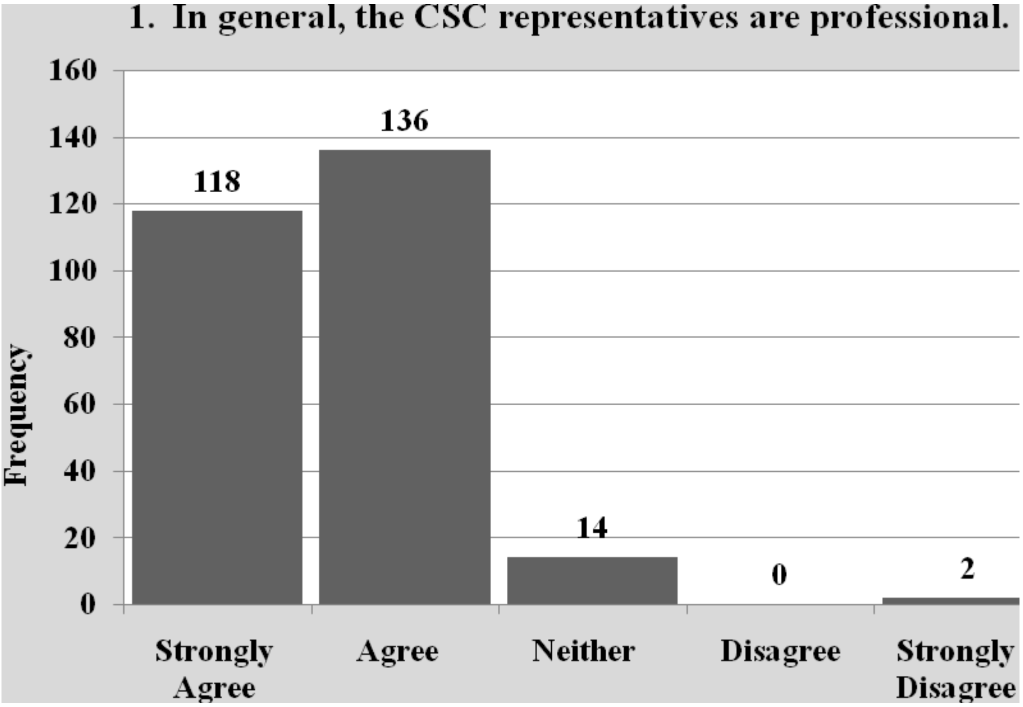

Figure 34 - Frequency Distribution: Professionalism of CSC Rep.

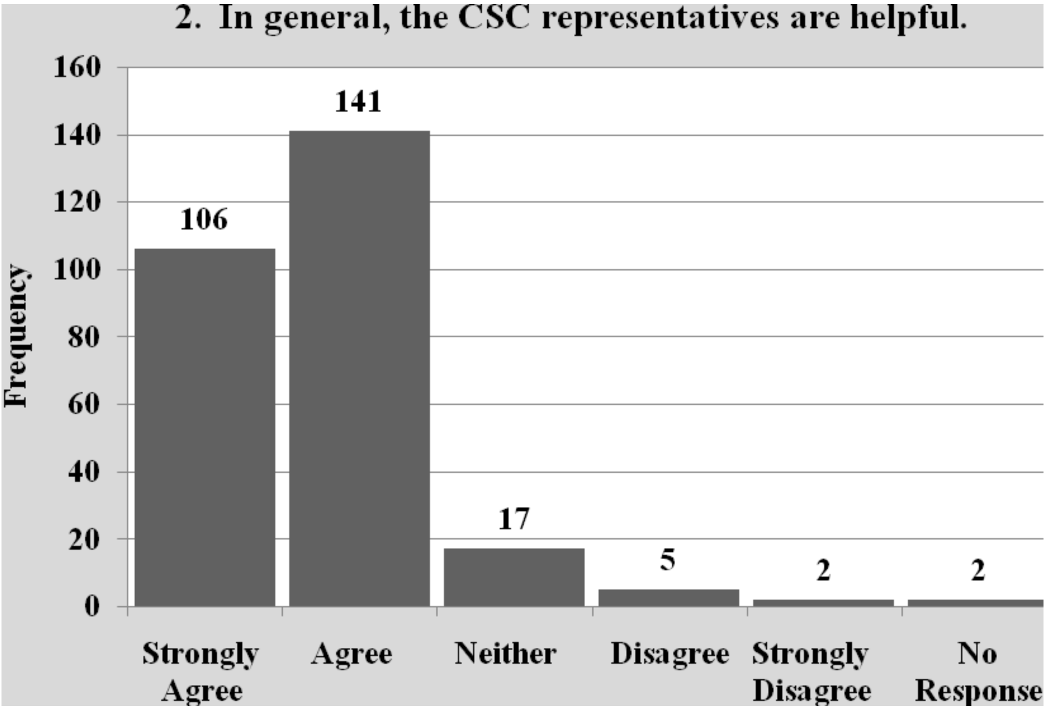

Figure 35 - Frequency Distribution: CSC Rep. was Helpful.

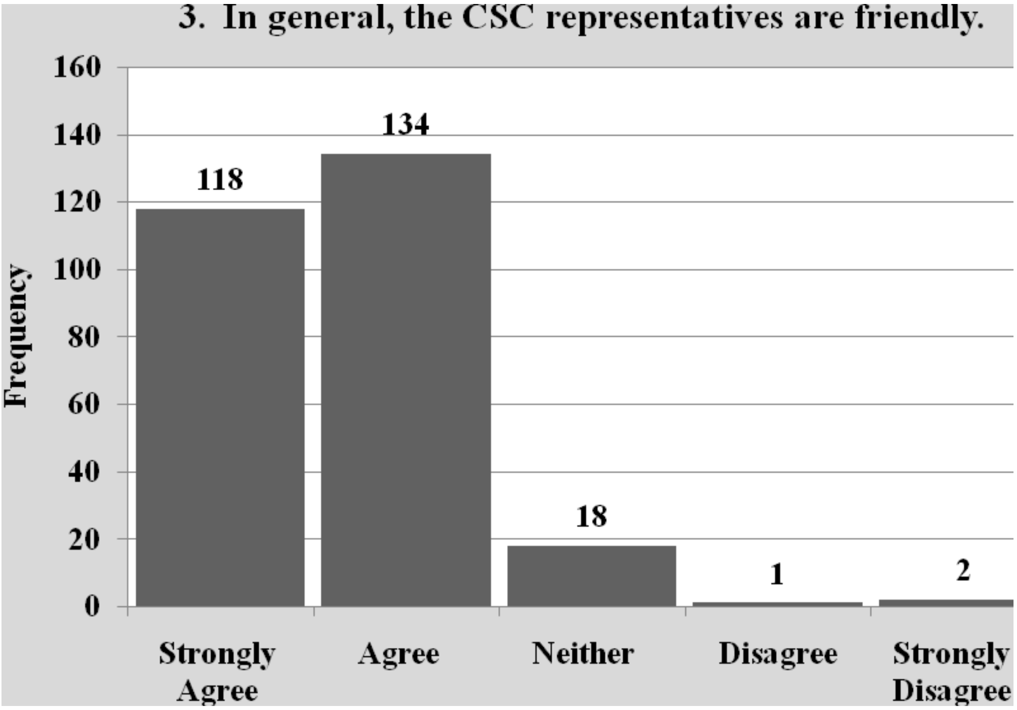

Figure 36 - Frequency Distribution: CSC Reps. are Friendly.

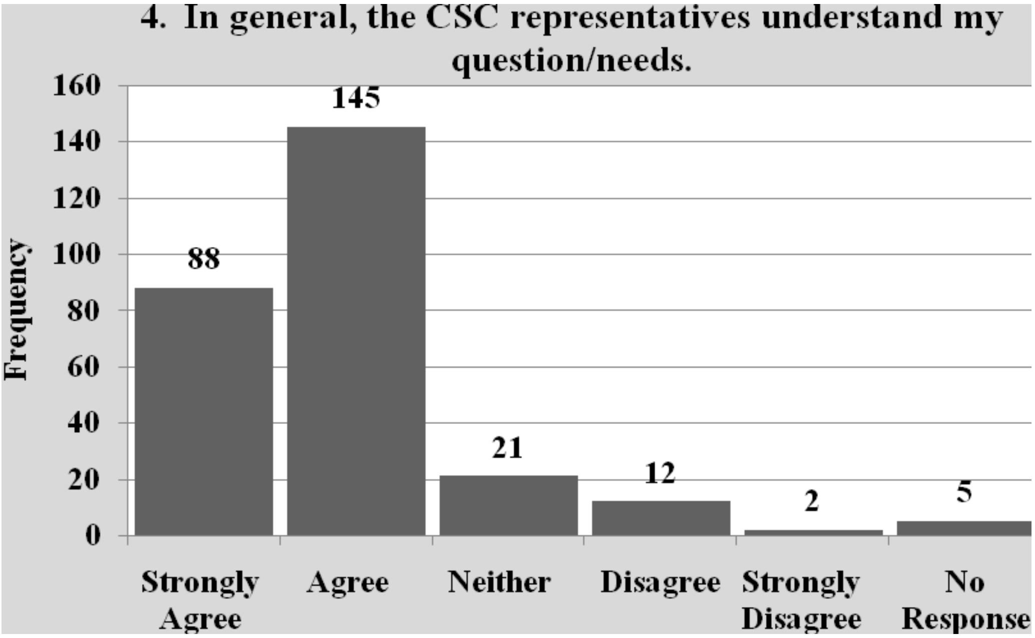

Figure 37 - Frequency Distribution: CSC Rep. Understood the Question/Need.

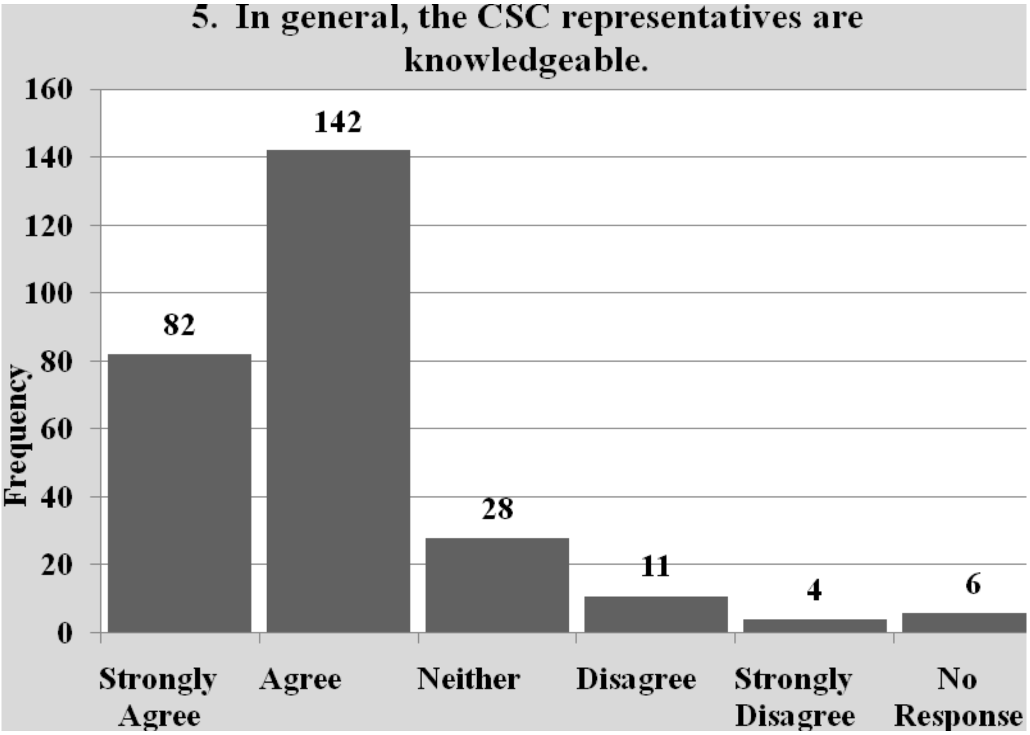

Figure 38 - Frequency Distribution: CSC Reps. are knowledgeable.

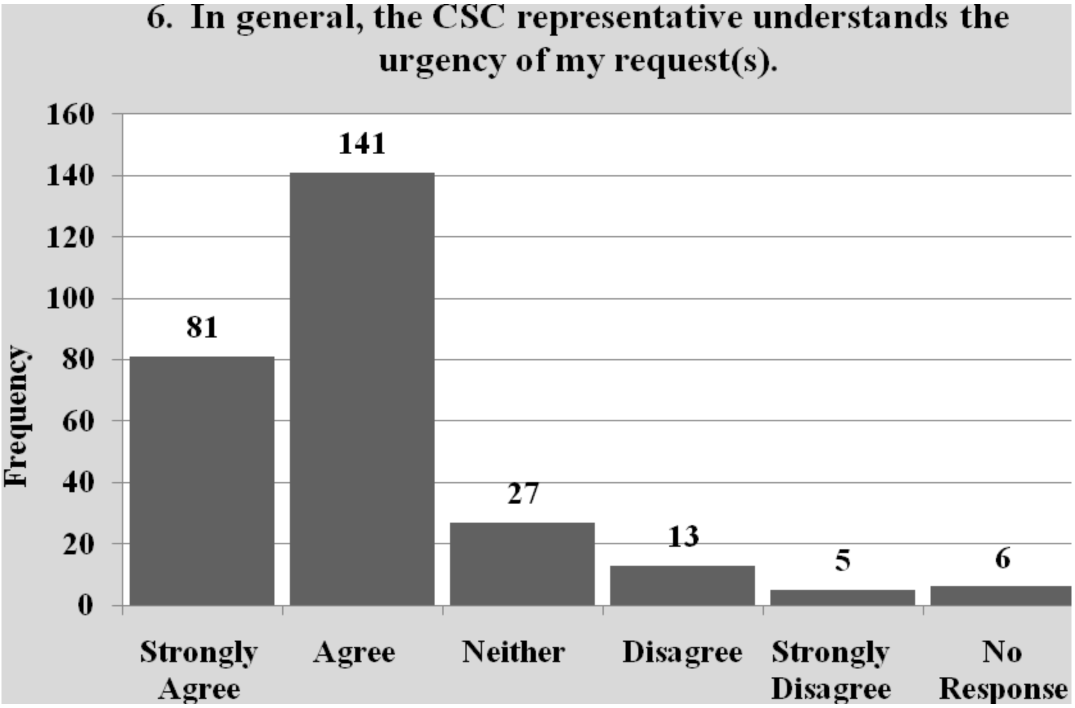

Figure 39 - Frequency Distribution: Urgency of Requests.

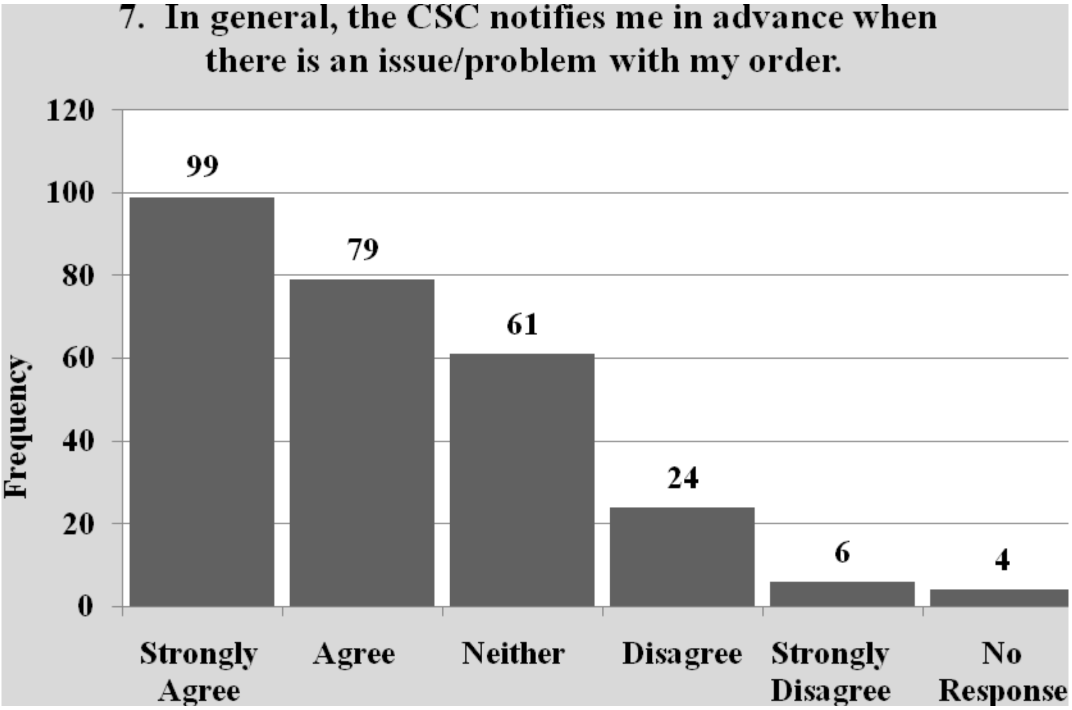

Figure 40 - Frequency Distribution: Customer Notification in Advance.

Segment Seven Analysis

Segment seven of the Kendall (2008) survey was perhaps the most important segment of the survey which consisted of two questions dealing with the overall customer satisfaction with the CSC. When asked to rate their overall satisfaction level with the CSC quality of service, over eighty-four percent of the participants indicated that they "agreed" or "strongly agreed". Additionally, when asked if they had other options, if they would still choose to get services from this Customer Service Center, over seventy-six percent "agreed" or "strongly agreed".

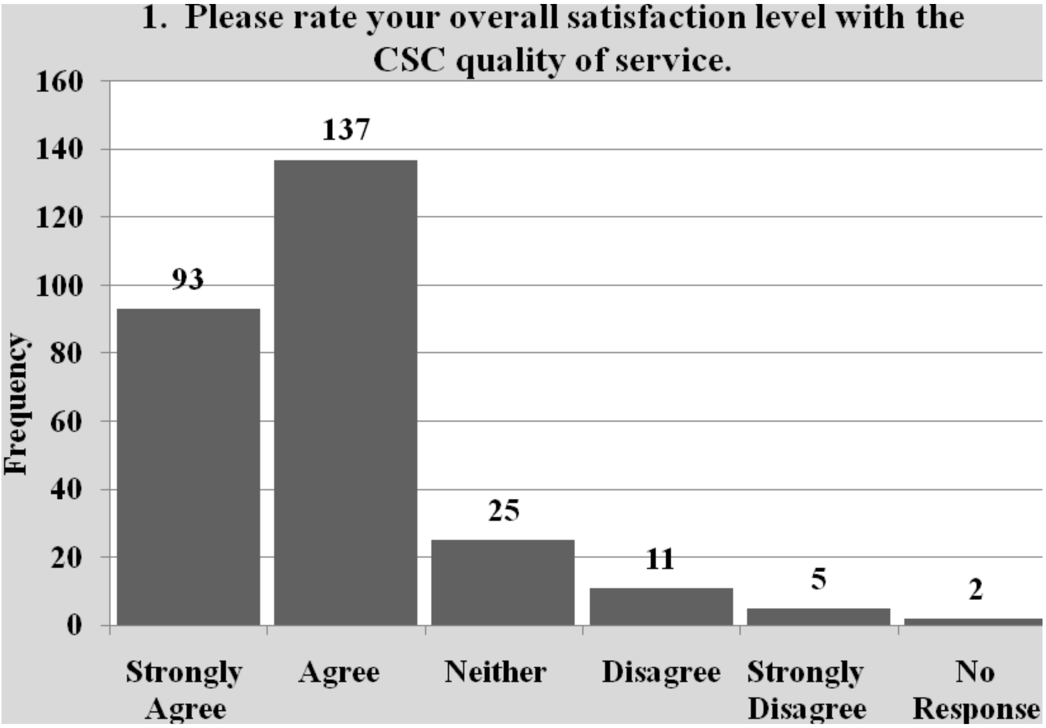

Figure 41 - Frequency Distribution: Customer's overall Satisfaction with the CSC.

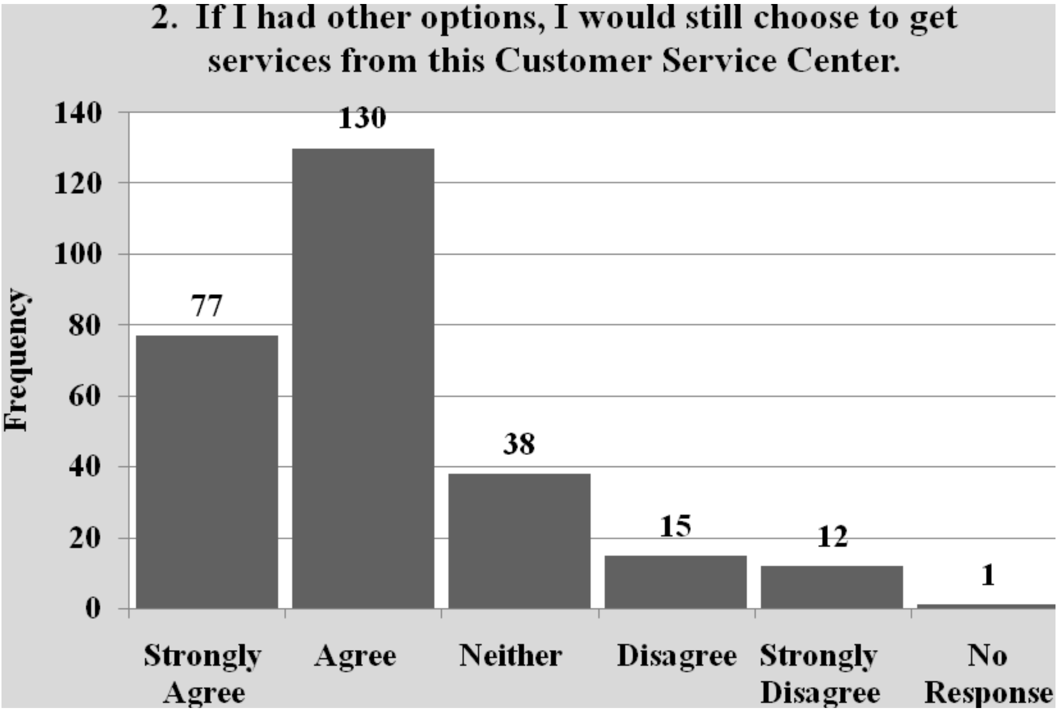

Figure 42 - Frequency Distribution: Would Customer Still Utilize CSC.

Segment Eight Analysis

Segment eight of the Kendall (2008) survey consisted of seven questions based on the customer's awareness and input on Customer Relationship Management (CRM) initiatives. Relative to the other survey segments, segment eight results were not as positive and demonstrate some potential areas for improvement. More than fifty-one percent of the participants were not aware that Customer Relationship Management (CRM) was a transformation initiative that includes the CSC, and more than sixty-seven percent were not aware of the Call Service Centers' CRM initiative before it began. Fifty-four percent "agreed' or "strongly agreed" that they believed the CSC was interested in their suggestions for improving their CRM initiative, and over fifty-one percent believed the CSC used suggestions from their customers to improve their CSC operations. Only forty percent of the participant indicated that the CSC had previously surveyed them for their input on improving processes. The last two questions of the survey received the lowest response rating given by the participants. Only thirty percent of the participants “agreed” or “strongly agreed” that they can see the results of their inputs over time, and twenty-six percent “agreed’ or “strongly agreed” that the CSC has continued to update them on the progress of CRM initiatives.

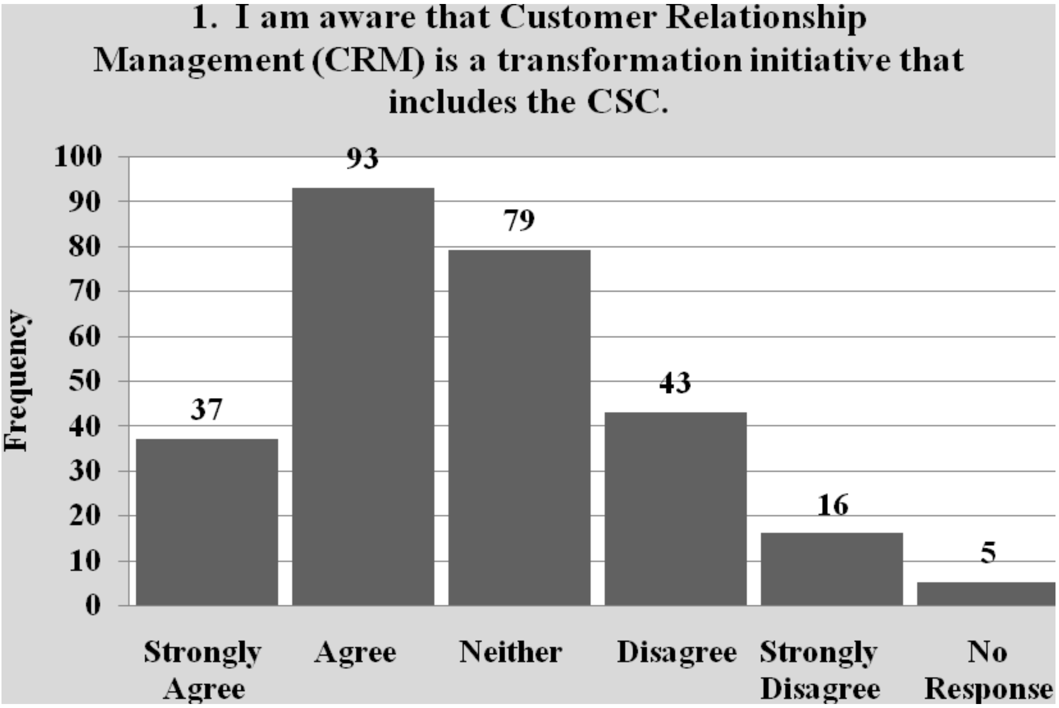

Figure 43 - Frequency Distribution: Awareness of CSC Initiative.

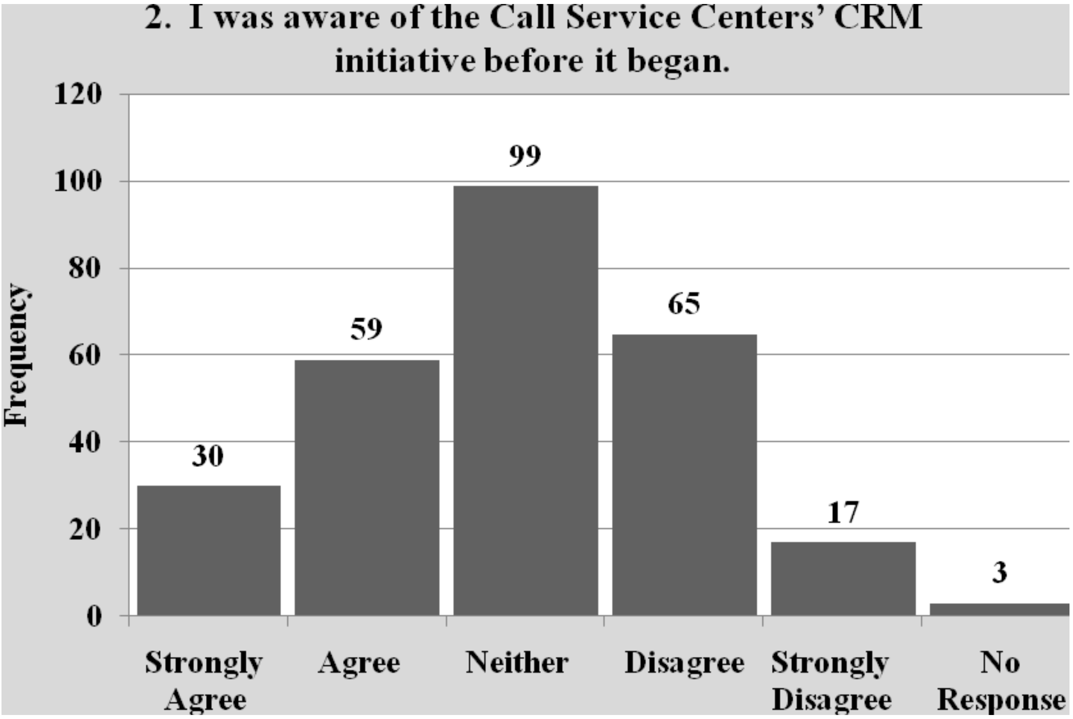

Figure 44 - Frequency Distribution: Awareness of CRM Initiative before it began.

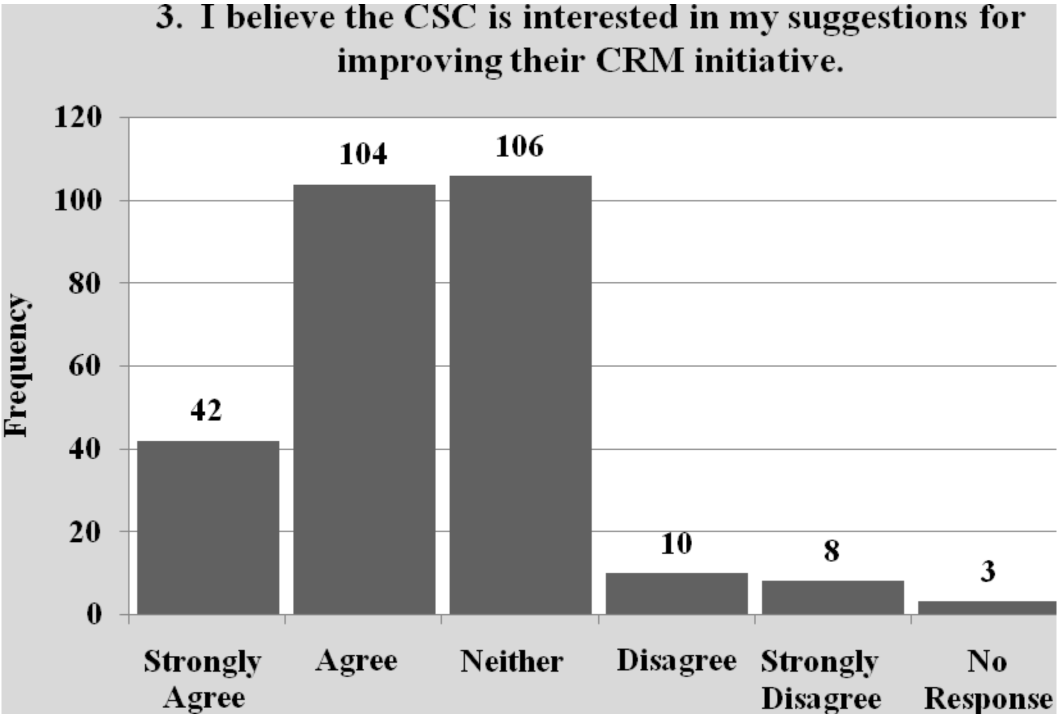

Figure 45 - Frequency Distribution: CSC's Interest in Suggestions.

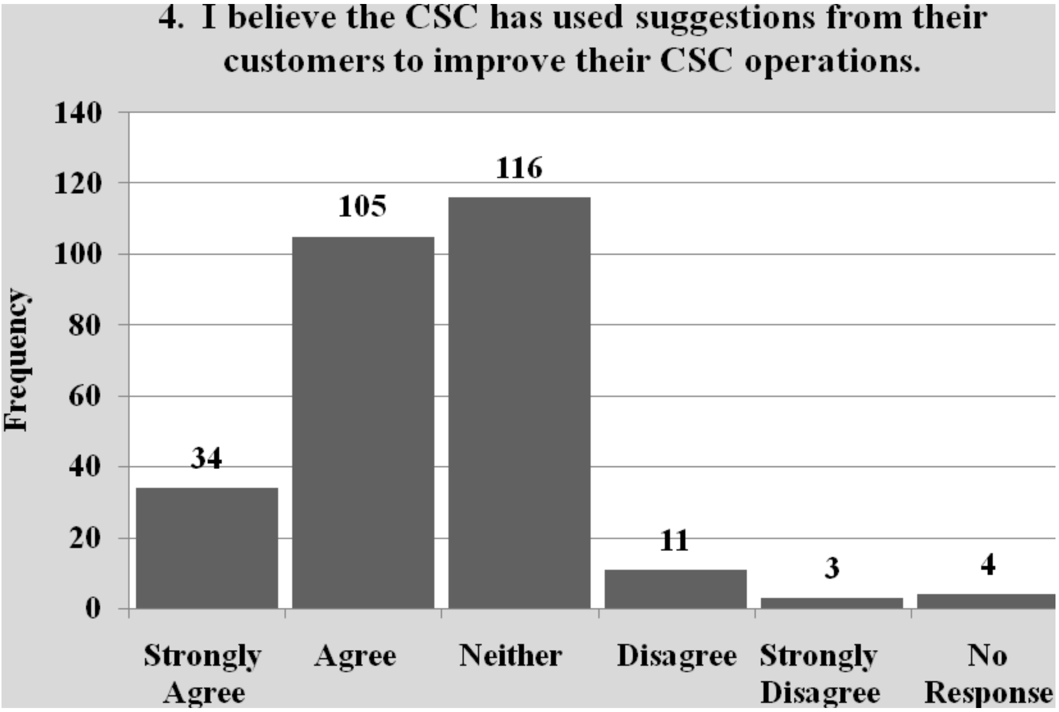

Figure 46 - Frequency Distribution: CSC use of Suggestions for Improvements.

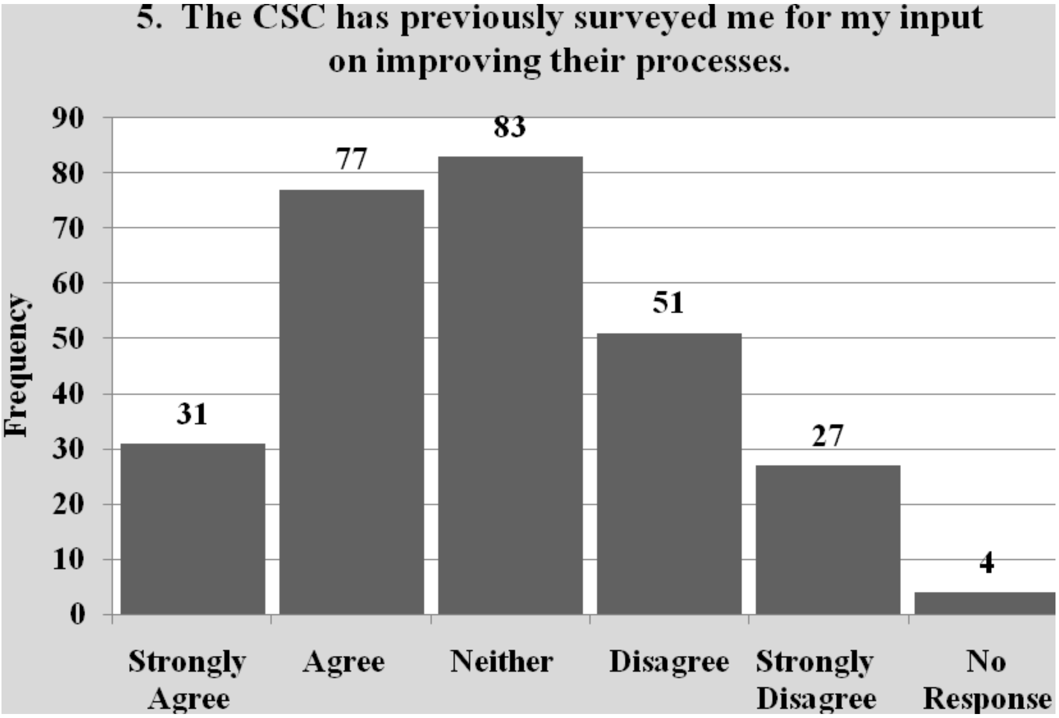

Figure 47 - Frequency Distribution: Customers that were previously surveyed.

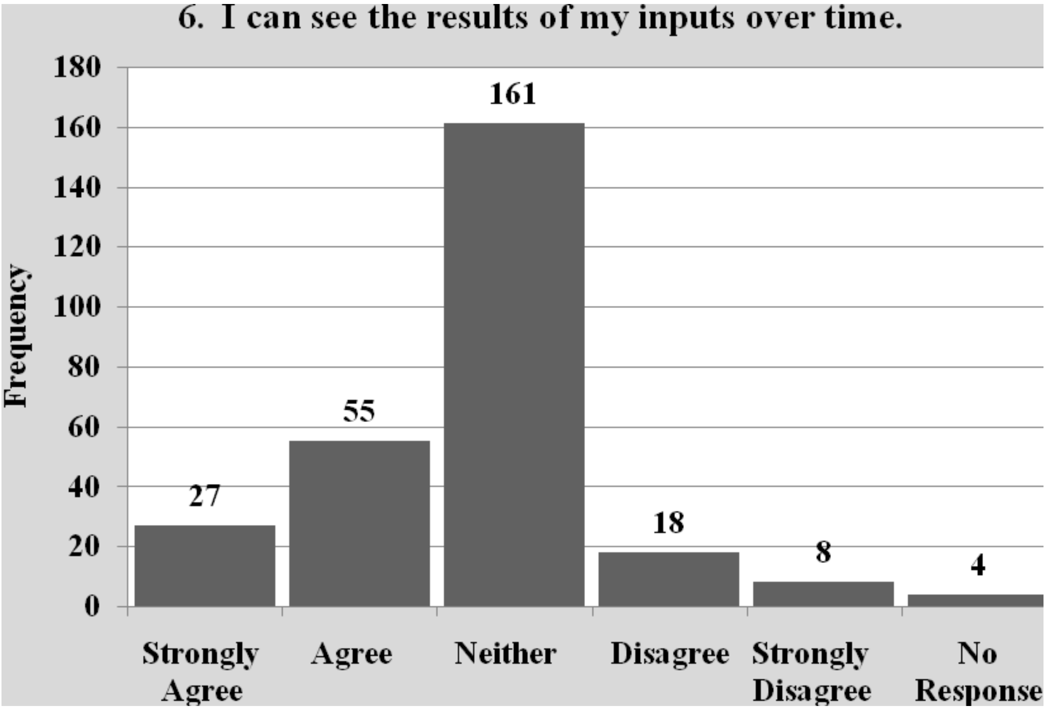

Figure 48 - Frequency Distribution: Customer can see results of inputs over time.

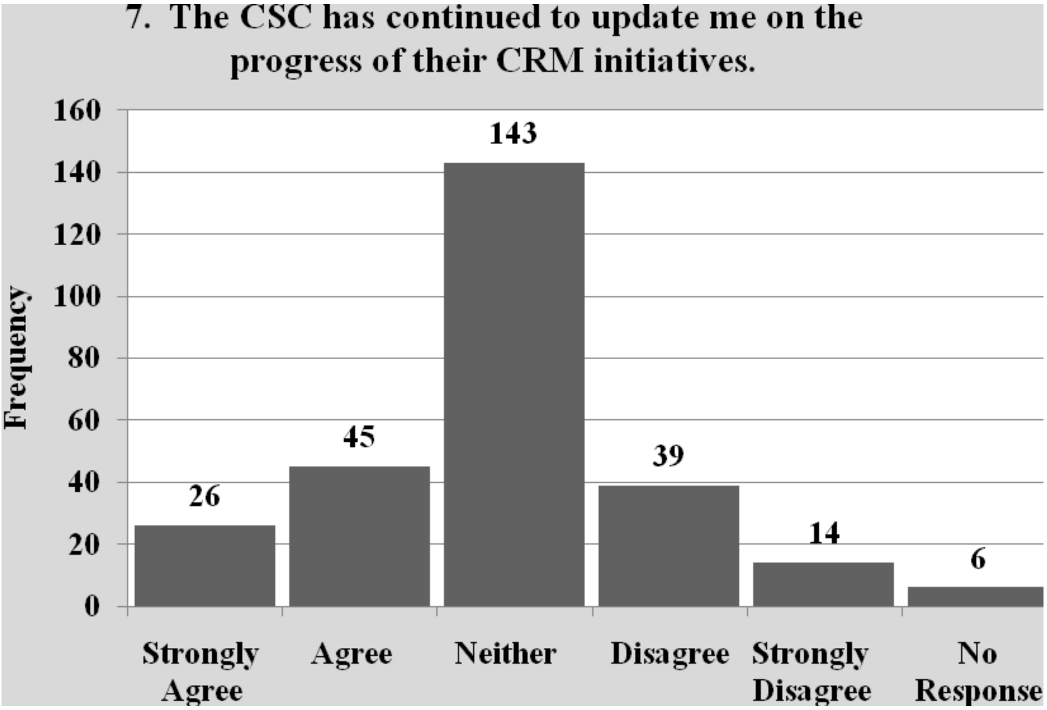

Figure 49 - Frequency Distribution: Updating Customers on CRM Initiatives.

Comparison by ALC Utilizing Data from the Kendall (2008) Survey

This portion of the chapter provides a detailed examination of the Kendall (2008) survey data by comparing the three customer service centers (CSCs) at AFMC's three ALCs. This analysis is broken down and presented by each segment of the survey. The ANOVA analysis performed on segments one, four, six, and seven indicated no significant statistical differences between the CSCs; therefore, these segments are excluded from this section. The purpose of this analysis is to provide AFMC's A4 Logistics division with information that can help them compare ALCs and identify areas for process improvement. This section attempts to answer the following investigative question:

2. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the three ALCs based on the data collected from the Kendall (2008) research survey?

Highlights of this analysis includes: The analysis indicates that Tinker ALC customers are on hold a less amount of time, before speaking to a customer representative, when compared to the Hill ALC. Tinker ALC customers spent a less amount of time on the phone with the Customer Service Agent, during their most recent call, than Warner Robins ALC customers, and Warner Robins spends the most time resolving customer's issues. Additionally, a higher percentage of Warner Robins customers responded that they would access information about CSC services using the internet, and would find the ability to track the status of a question via a web page more valuable, when compared to Tinker ALC customers. Lastly, Tinker ALC customers were more aware of the Call Service Centers' CRM initiative before it began than Warner Robins ALC customers, and Hill ALC customers had been previously surveyed for their input on improving the processes more often than Tinker ALC customers.

Segment Two Analysis

This section attempts to identify difference between AFMC's three ALCs based on the length of time before reaching a Customer Service Center (CSC) agent. Segment two, of the Kendall (2008) survey, consisted of five questions; the following summarizes the results of the comparisons. The ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question two, between the Tinker ALC and the Hill ALC, with a resulting F(2,248) = 3.813, p=.023.

2. On average, how long do you hold before you speak with a customer service representative?

   0-1 minutes
   1-2 minutes
   2-3 minutes
   3-4 minutes
   4-5 minutes
   5-6 minutes
   6+ minutes

Figure 50 provides a graphical representation of segment two, question two by ALC. Both the ANOVA and the graphical representation indicate that, on average, Hill ALC customers spend more time on hold than Tinker ALC customers before speaking to a CSC representative.

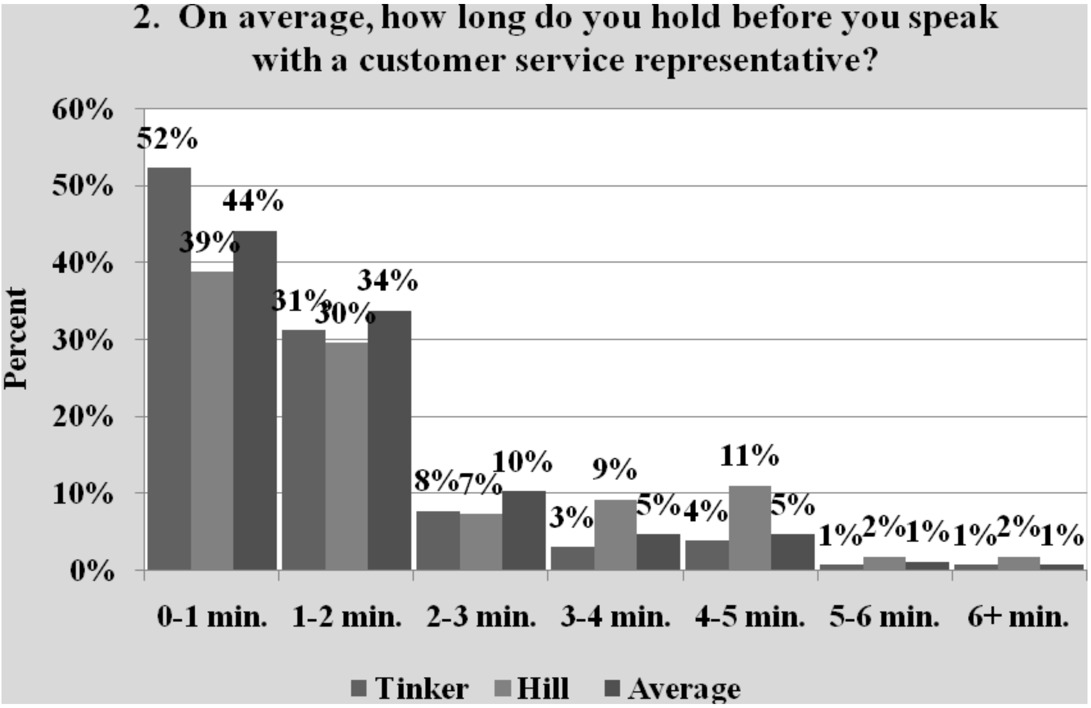

Figure 50 - Frequency Distribution: Segment Two Question Two by ALC

Segment Three Analysis

This section attempts to identify difference between AFMC's three ALCs based on call resolution parameters. Segment three of the Kendall (2008) survey consisted of five question that covered call resolution parameters, and the following summarizes the results of those comparisons. The ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question one, between the Tinker ALC and the Warner Robins ALC, with a resulting F(2,246) = 2.608, p=.076.

1. During your most recent call, how long were you on the phone with the customer service representative?

   Less than 5 minutes
   5 to 9 minutes
   10 to 19 minutes
   20 to 29 minutes
   30 to 39 minutes
   40 minutes or longer

Figure 51 provides a graphical representation of segment three, question one by ALC. Both the ANOVA and the graphical representation indicate that, on average, Tinker ALC customers spent a less amount of time on the phone with the Customer Service Agent, during their most recent call, than Warner Robins ALC customers.

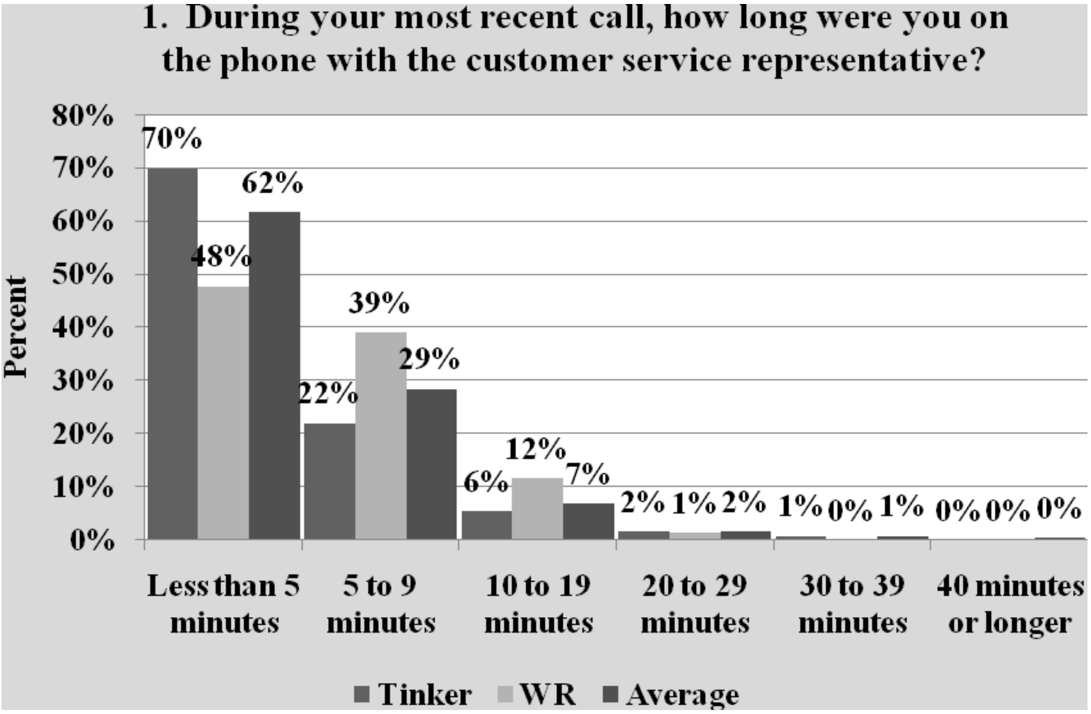

Figure 51 - Frequency Distribution: Segment Three Question One by ALC.

Additionally, the ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question two, between the Warner Robins ALC and the Tinker ALC, and the Warner Robins ALC and the Hill ALC, with a resulting F(2,246) = 6.496, p=.002.

2. What is the average length of time you are on the phone with a customer service representative?

Less than 5 minutes
5 to 9 minutes

10 to 19 minutes
20 to 29 minutes
30 to 39 minutes
40 minutes or longer

Figure 52 provides a graphical representation of segment three, question two by ALC. Both the ANOVA and the graphical representation indicate that, on average, Warner Robins ALC customers are on the phone with the CSC agents a longer amount of time than Hill ALC and Tinker ALC customers.

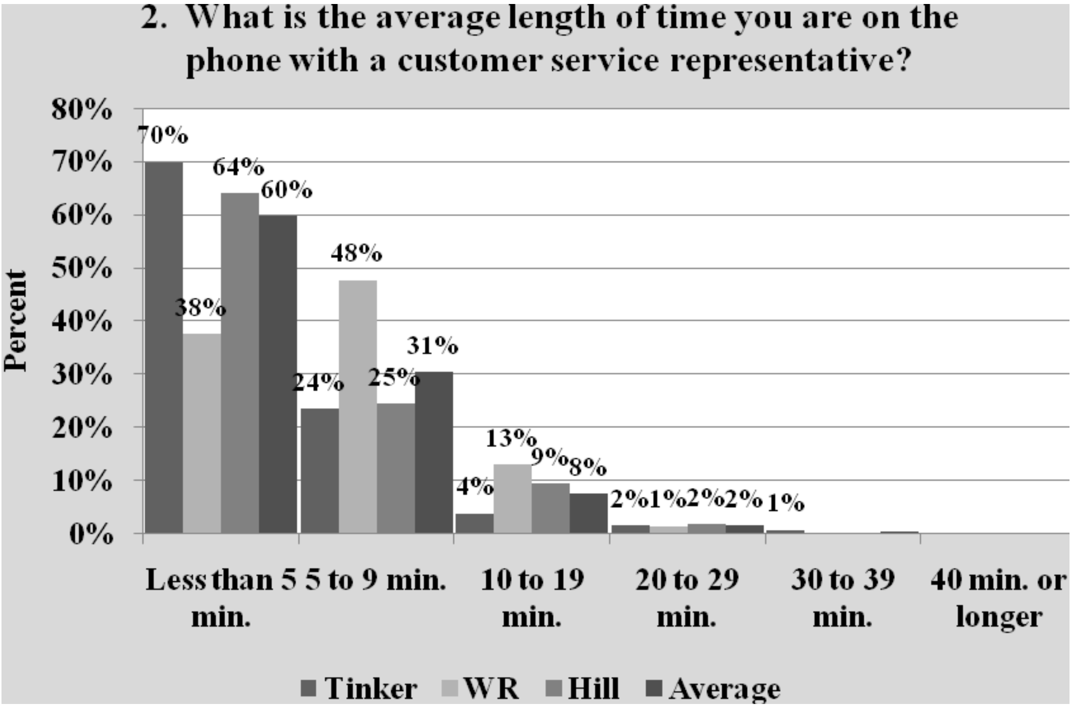

Figure 52 - Frequency Distribution: Segment Three Question Two by ALC

Segment Five Analysis

Segment five of the Kendall (2008) survey consisted of five question focused on gauging the awareness of existing web services and the desire or drive to utilize those services. The ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question one, between the Tinker ALC and the Warner Robins ALC, with a resulting F(2,249) = 2.477, p=.086.

1. If available, I would access information about CSC services using the Internet.

   1 2 3 4 5
   Strongly Disagree Disagree Neither Agree Strongly Agree

Figure 53 provides a graphical representation of segment five, question one by ALC. Both the ANOVA and the graphical representation indicate that, on average, The graphical representation indicates that a higher percentage of Warner Robins customers responded that they would access information about CSC services using the internet, when compared to Tinker ALC customers.

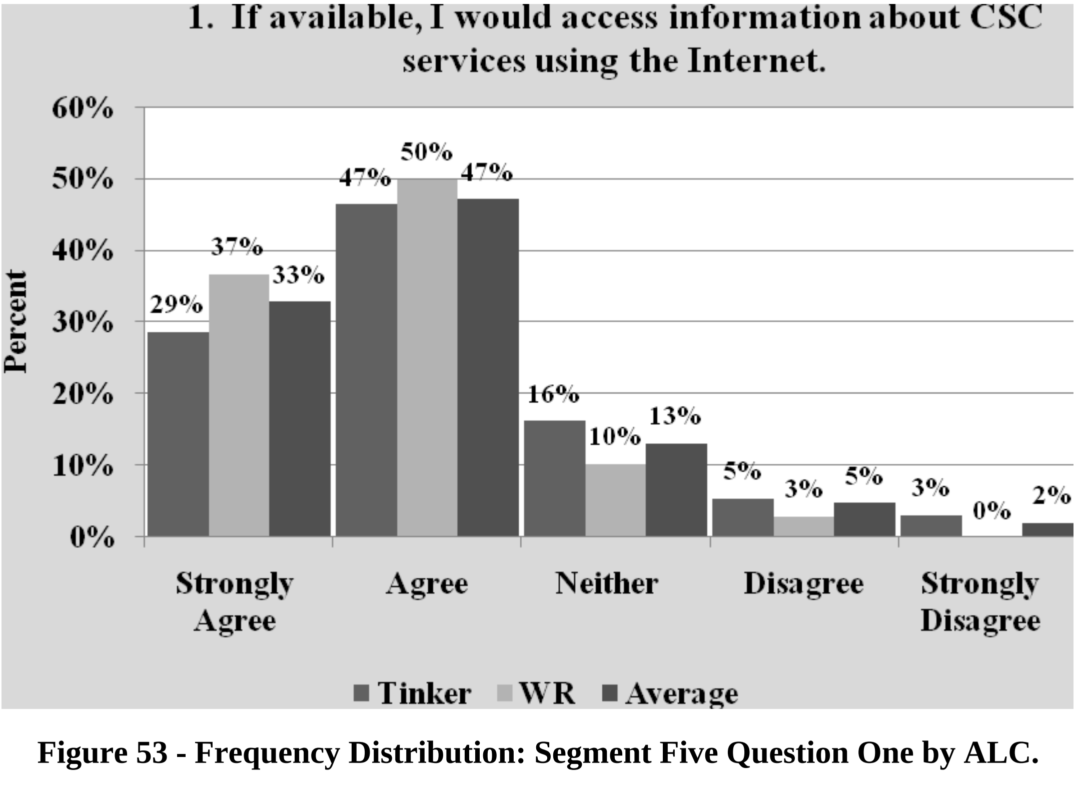

Figure 53 - Frequency Distribution: Segment Five Question One by ALC.

Additionally, the ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question two, between the Tinker ALC and the Warner Robins ALC, with a resulting F(2,248) = 3.463, p=.033.

2. It would be valuable to me to be able to track the status of a question via a web page

   1 2 3 4 5
   Strongly Disagree Disagree Neither Agree Strongly Agree

Figure 54 provides a graphical representation of segment five, question two by ALC. Corresponding to the last question, both the ANOVA and the graphical representation indicate that, on average, Warner Robins ALC customers would find the ability to track the status of a question via a web page more valuable than Tinker ALC customers.

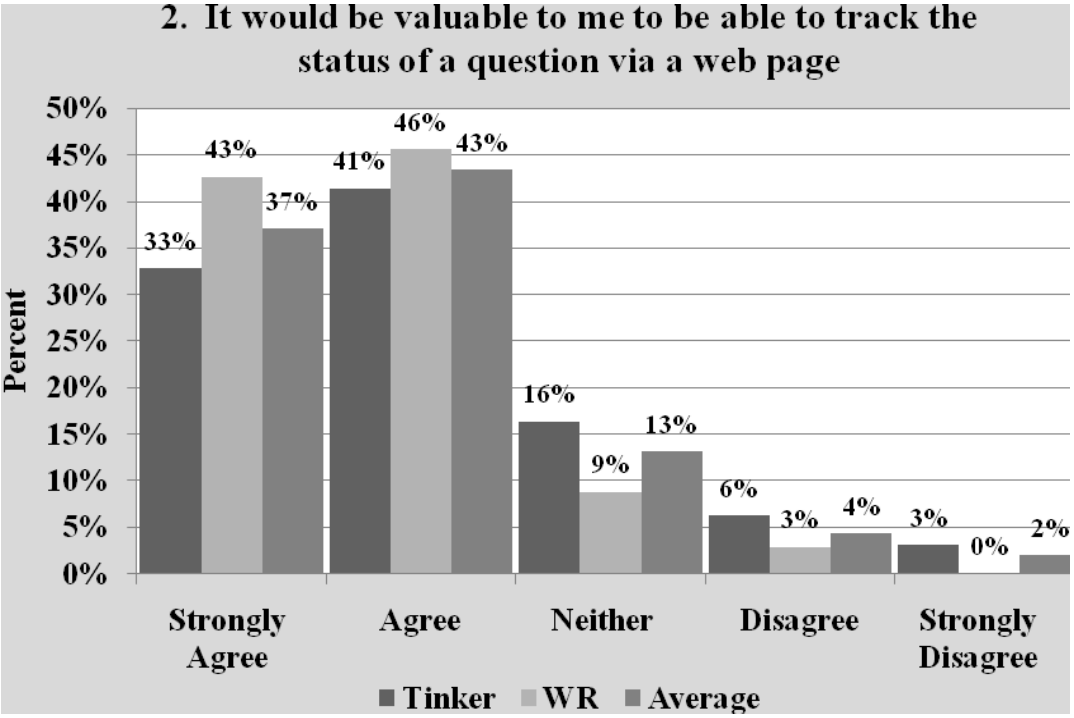

Figure 54 - Frequency Distribution: Segment Five Question Two by ALC.

Finally, the ANOVA analysis indicated that a significant statistical difference existed, for question three, between the ALCs with a resulting F(2,248) = 2.598, p=.076.

3. I would like a web-based service to be provided.

1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

Figure 55 provides a graphical representation of segment five, question three by ALC. Even though the ANOVA indicated a statistical difference, both the Tukey and the graphical representation do not indicate that a difference exists.

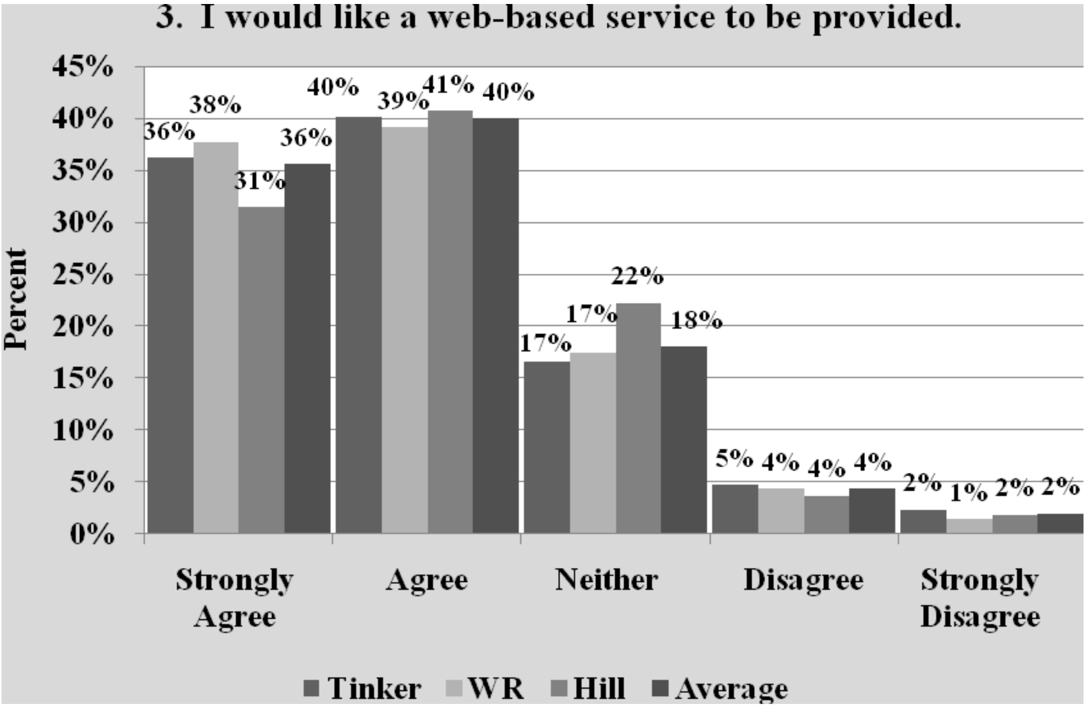

Figure 55 - Frequency Distribution: Segment Five Question Three by ALC.

Segment Eight Analysis

This section attempts to identify difference between AFMC's three ALCs based on the customer's awareness and input on Customer Relationship Management (CRM) initiatives. Segment eight of the Kendall (2008) survey consisted of seven questions, and the following summarizes the results of the comparisons made. Of the seven questions in segment six, significant statistical differences existed between two of the questions compared.

The ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question two, between the Tinker ALC and the Warner Robins ALC, and the Tinker ALC and the Hill ALC, with a resulting F(2,248) = 2.715, p=.068.

2. I was aware of the Call Service Centers' CRM initiative before it began.

1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

Figure 56 provides a graphical representation of segment eight, question two by ALC. Both the ANOVA and the graphical representation indicate that, on average, Tinker ALC customers were more aware of the Call Service Centers' CRM initiative before it began than Warner Robins ALC customers.

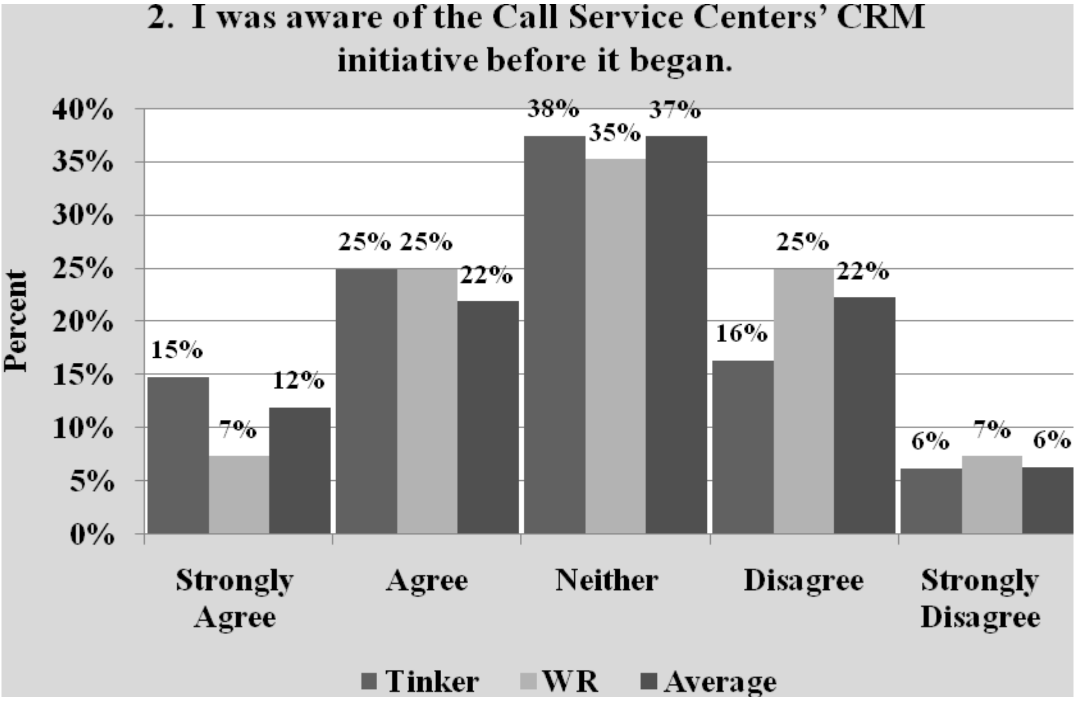

Figure 56 - Frequency Distribution: Segment Eight Question Two by ALC.

Additionally, the ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question five, between the Tinker ALC and the Hill ALC, with a resulting F(2,246) = 2.349, p=.098.

5. The CSC has previously surveyed me for my input on improving their processes.

1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

Figure 57 provides a graphical representation of segment eight, question five by ALC. Both the ANOVA and the graphical representation indicate that, on average, Hill ALC customers had been previously surveyed for their input on improving the processes more often than Tinker ALC customers.

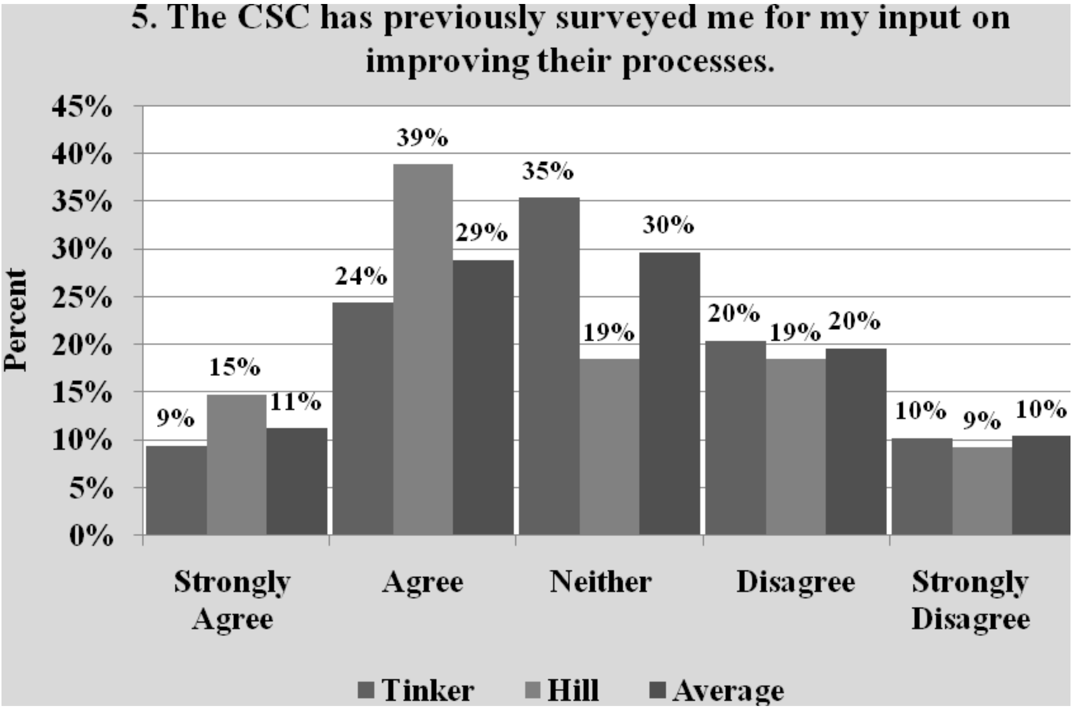

Figure 57 - Frequency Distribution: Segment Eight Question Five by ALC.

Comparison by ALC Utilizing Data from the Sullivan (2006) Survey

This portion of the chapter provides a detailed examination of the Sullivan (2006) survey data by comparing the three ALCs which were surveyed. This analysis is broken down and presented by each segment of the survey. The purpose of this analysis is to provide a different perspective of the Sullivan (2006) survey which did not compare the results of the survey based on the performance of each individual ALC. This section attempts to answer the following research investigative question:

3. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the three ALCs based on data collected from the Sullivan (2006) research survey?

Highlights of this analysis includes: On average, Hill ALC customers utilized the Hill ALC longer than Tinker ALC customers utilized the Tinker ALC. Hill ALC customers, on average, were on hold a less amount of time than Tinker ALC and Warner Robbins ALC customers, and Hill ALC customers found their wait times more acceptable. Additionally, Warner Robbins customers spent a longer average amount of time on the phone with the customer service representative, and spent more calls to resolve customer issues. The ANOVA analysis performed on segments four, five, six, seven, and eight indicated no significant statistical differences between the CSCs.

Segment One Analysis

This section attempts to identify difference between AFMC's three ALCs based on frequency of usage and demographics. Segment one of the Sullivan (2006) survey consisted of eight questions that covered frequency of usage and demographics. Due to the nature of question one, which was included to determine the primary Customer Service Center (CSC) that the customer worked with, it was excluded from this analysis. The following summarizes the results of the comparisons. When examining how long customers had been using the CSC services, both the ANOVA and the graphical representation indicate that, on average, Hill ALC customers have been utilizing the Hill ALC longer than Tinker ALC customers have been utilizing the Tinker ALC. Segment one had no other significant statistical difference that existed between ALCs.

The ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question three, between the Hill ALC and the Tinker ALC, and the Hill ALC and the Warner Robbins ALC, with a resulting F(2,252) = 4.115, p=.017.

3. How long have you been using the CSC services?

Less than 1 month
1 month to 6 months
More than 6 months

As shown in **Error! Reference source not found.**, when comparisons were made between the three ALCs, a Significance value less of than .1 resulted. This indicated a significant statistical difference between the Hill ALC and the other two ALCs.

Figure 58 provides a graphical representation of segment one, question three by ALC. Both the ANOVA and the graphical representation indicate that, on average, Hill ALC customers have been utilizing the Hill ALC longer than Tinker ALC customers and Warner Robbins ALC customers have been utilizing their respective ALCs.

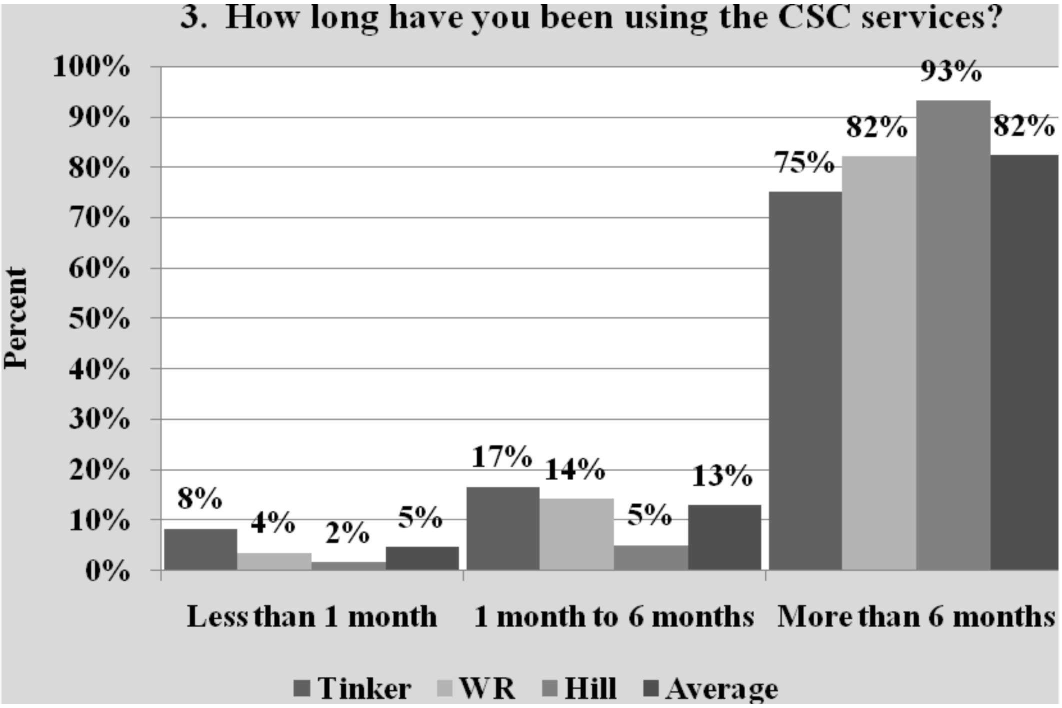

Figure 58 - Frequency Distribution: Segment One Question Three by ALC.

Segment Two Analysis

This section attempts to identify difference between AFMC's three ALCs based length of time before reaching a Customer Service Center (CSC) agent. Segment two, of the Sullivan (2006) survey, consisted of four questions; the following summarizes the results of the comparisons. When examining question one, how long customers are on hold prior to speaking to a customer service representative, Hill ALC customers, on average, are on hold a less amount of time than Tinker ALC and Warner Robbins ALC customers. Additionally, Hill ALC customers find their wait times more acceptable when compared to the customers of Tinker and Warner Robbins ALC. Questions three and four did not present any statistical differences.

The ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question one, between the Warner Robbins ALC and the Hill ALC, with a resulting F(2,253) = 4.759, p=.009.

1. On average, how long do you hold before you speak with a customer service representative?

   0-1 minutes
   1-2 minutes
   2-3 minutes
   3-4 minutes
   4-5 minutes
   5-6 minutes
   6+ minutes

Figure 59 provides a graphical representation of segment two, question one by ALC. Both the ANOVA and the graphical representation indicate that Hill ALC customers, on average, are on hold a less amount of time than Tinker ALC and Warner Robbins ALC customers.

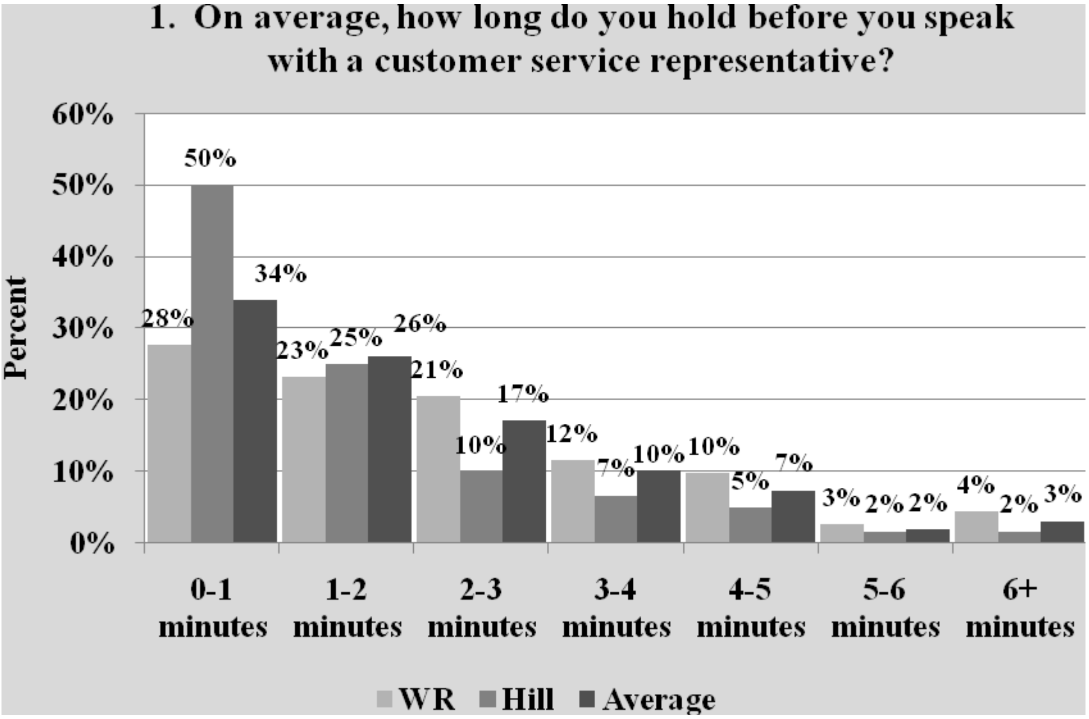

Figure 59 - Frequency Distribution: Segment Two Question One by ALC.

The ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question two, between the Hill ALC and the Tinker ALC, and the Hill ALC and the Warner Robins ALC, with a resulting F(2,253) = 3.287, p=.039. This question is referencing the previous survey question, segment two, question one.

2. This is an acceptable amount of time to wait for service.

1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

Figure 60 provides a graphical representation of segment two, question two by ALC. Both the ANOVA and the graphical representation indicate that Hill ALC customers find their wait times more acceptable, when compared to the customers of the Tinker and Warner Robbins ALC. This conclusion is logical when examining the analysis of the previous question: Hill ALC customers are on hold less often; therefore, they find their hold times more acceptable.

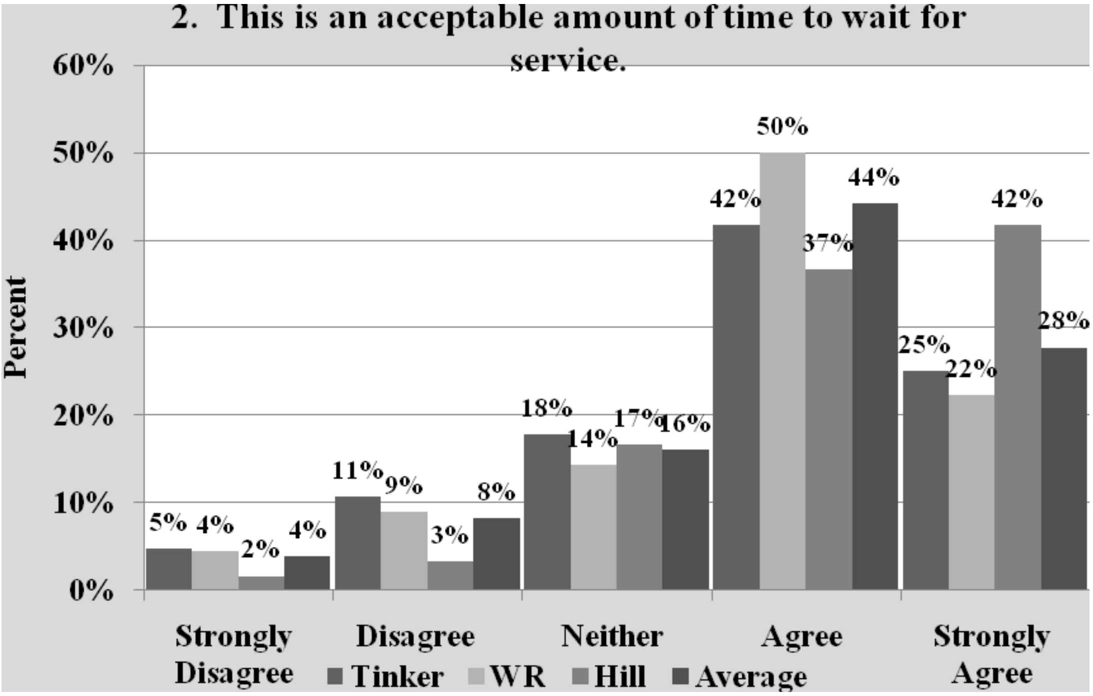

Figure 60 - Frequency Distribution: Segment Two Question Two by ALC.

Segment Three Analysis

This section attempts to identify difference between AFMC's three ALCs based on call resolution parameters. Segment three of the Sullivan (2006) survey consisted of four question that covered call resolution parameters, and the following summarizes the results of those comparisons. When examining the average length of time a customer was on the phone with a customer service representative, both the ANOVA and the graphical representation indicate that Warner Robbins spent a longer average amount of time on the phone with the customer service representative. No significant difference existed between customer's satisfaction with the average time it takes the CSC to answer questions. When examining question three, if phone calls are normally resolved with one phone call, both the ANOVA and the graphical representation indicate that Warner Robbins spends more calls to resolve customer issues. Lastly, concerning question four, "It is critical to me that my issue is resolved with one phone call", no significant statistical difference existed.

The ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question one, between the Warner Robins ALC and the Tinker ALC, and the Warner Robins ALC and the Hill ALC, with a resulting F(2,253) = 5.948, p=.003.

1. What is the average length of time you are on the phone with a customer service representative?

   Less than 5 minutes
   5 to 9 minutes
   10 to 19 minutes
   20 to 29 minutes
   30 to 39 minutes
   40 minutes or longer

Figure 61 provides a graphical representation of segment three, question one by ALC. Both the ANOVA and the graphical representation indicated that Warner Robbins spent a longer average amount of time on the phone with the customer service representative than the other ALCs.

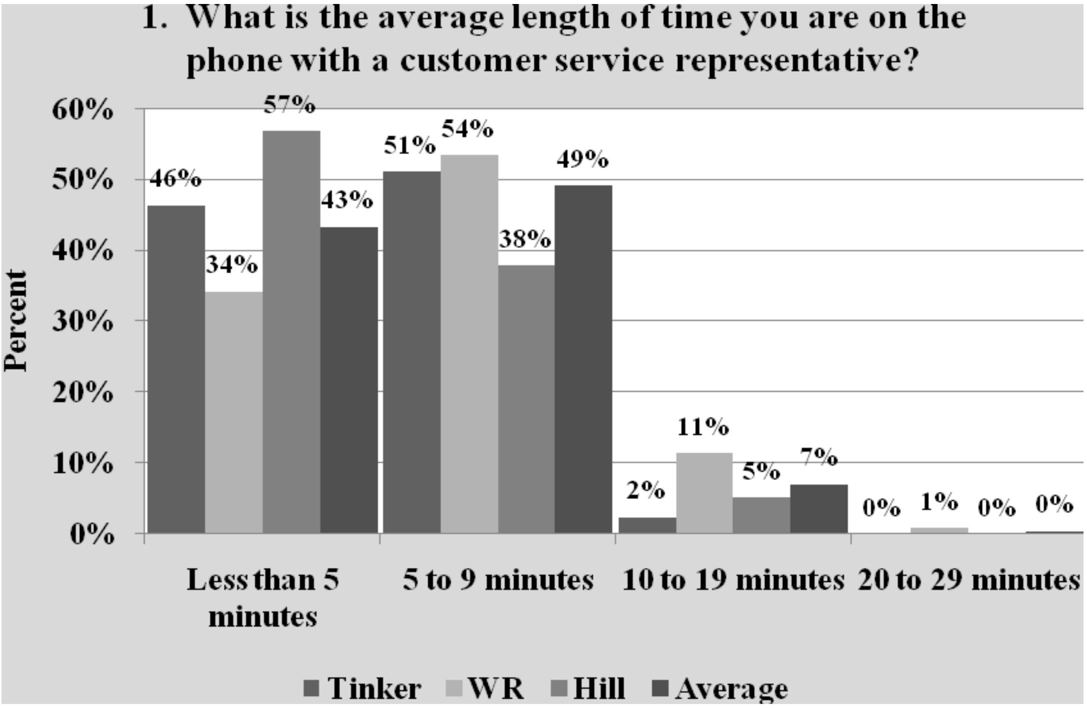

Figure 61 - Frequency Distribution: Segment Three Question One by ALC.

The ANOVA and Tukey analysis indicated that a significant statistical difference existed, for question three, between the Warner Robins ALC and the Tinker ALC, and the Warner Robins ALC and the Hill ALC, with a resulting F(2,253) = 4.167, p=.017.

3. My issues are normally resolved with one phone call.

1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

As shown in **Error! Reference source not found.** when comparisons were made between Warner Robbins and the other ALCs, a Significance value less than .1 resulted. This indicated a significant statistical difference between Warner Robbins and the other ALCs.

Figure 62 provides a graphical representation of segment three, question three by ALC. Both the ANOVA and the graphical representation indicate that Warner Robbins spends more calls to resolve customer issues.

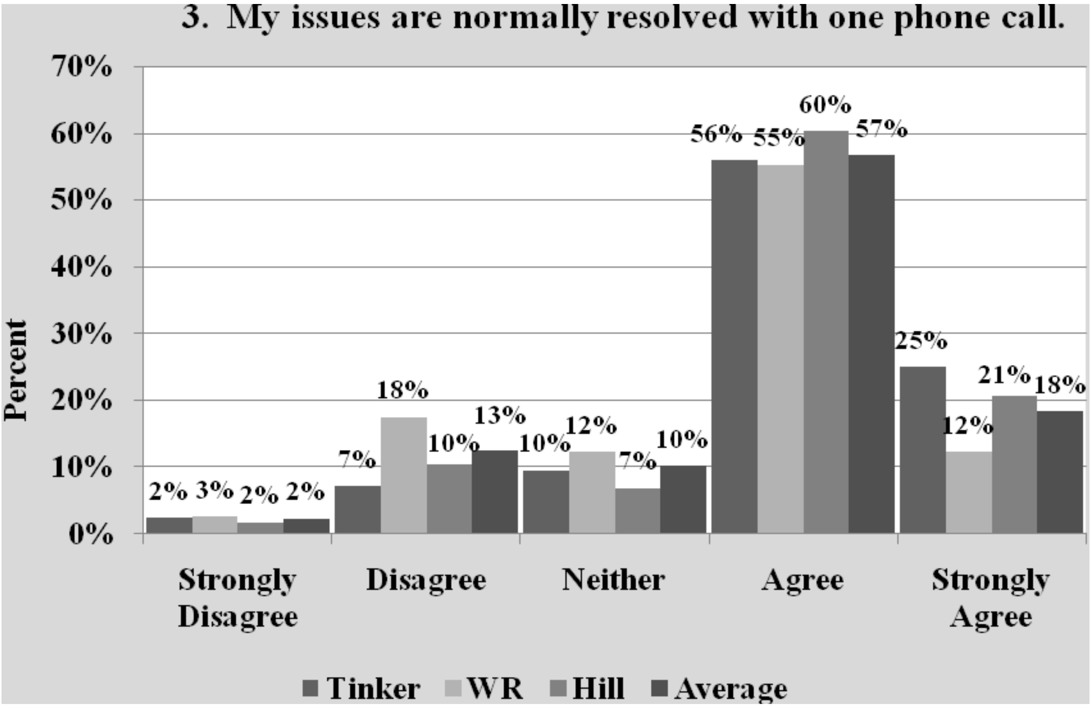

Figure 62 - Frequency Distribution: Segment Three Question Three by ALC.

Comparison between the Sullivan Survey (2006) and the Kendall Survey (2008)

This portion of the chapter provides a detailed examination of comparisons conducted between the Sullivan (2006) survey data and the Kendall (2008) survey data. This analysis is broken down and presented by each segment of the survey. The purpose of this analysis is to determine and present differences in customer satisfaction that occurred since the original Sullivan (2006) survey and the current Kendall (2008) survey. This section attempts to answer the following research investigative question:

4. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the data collected from the Sullivan (2006) research survey and the data collected from the Kendall (2008) research survey?

Highlights of this analysis includes: A majority of the customers that responded to the Kendall (2008) survey (51%) utilized the Tinker ALC and a majority of the customers that responded to the Sullivan (2006) survey (44%) utilized the Warner Robins ALC. The Sullivan (2006) survey had a much greater percentage of daily customers (37%) that responded when compared to the Kendall (2008) survey where 15% of the respondents indicated that they had contacted the CSC daily. Additionally, the Kendall (2008) survey had 29% of the respondents indicate that they contacted the CSC several times during the past year, compared to the Sullivan (2006) results of 14%. The average hold time before speaking to a customer service representative had decreased from the time of the Sullivan (2006) survey to the Kendall (2008) survey, and less Kendall (2008) survey respondents indicated that they hang up, due to those wait times. On average, the Kendall (2008) respondents were on the phone, with the customer service representative, a less amount of time than the Sullivan (2006) respondents; however, a higher percentage of the Sullivan (2006) survey respondents indicated that their issues were normally resolved with one phone call when compared to the Kendall (2008) survey. The Kendall (2008) survey respondents felt that it was more important to have their issues resolved with one phone call than the Sullivan (2006) respondents. The Sullivan (2006) survey respondents felt that it was more important for the CSC to keep them informed of the status of open tickets than the Kendall (2008) survey. The Kendall (2008) respondents felt that the CSC is more interested in their suggestions for improving AFMC's CRM initiatives than the Sullivan (2006) survey respondents. Finally, more respondents had been previously surveyed for their input on improving processes from the Sullivan (2006) survey.

Segment One Analysis

The independent T-test analysis indicated that a significant statistical difference existed for question one: T(438) = -2.70, P = .007, question two: T(466) = 4.31, P = .000, and question seven T(466) = -2.81, P = .005.

1. The primary Customer Service Center (CSC) that I work with is at __________.
   Tinker AFB
   Warner Robins AFB
   Hill AFB

2. How often do you use the Customer Service Centers (formerly the MICAP Control Centers)?
   Daily
   Once a week or more
   Once a month or more
   Several times during the past year

7. My calls are normally in support of the _________
   Weapon System
   Ground or Training System
   Program
   Project
   Multiple systems and/or programs

Figure 63 provides a graphical representation of segment one, question one comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that a majority of the customers that responded to the Kendall (2008) survey (51%) utilized the Tinker ALC and a majority of the customers that responded to the Sullivan (2006) survey (44%) utilized the Warner Robins

ALC. These differences, and the affects that they could contribute to the outcome of each respective survey, should be considered throughout the remainder of this analysis.

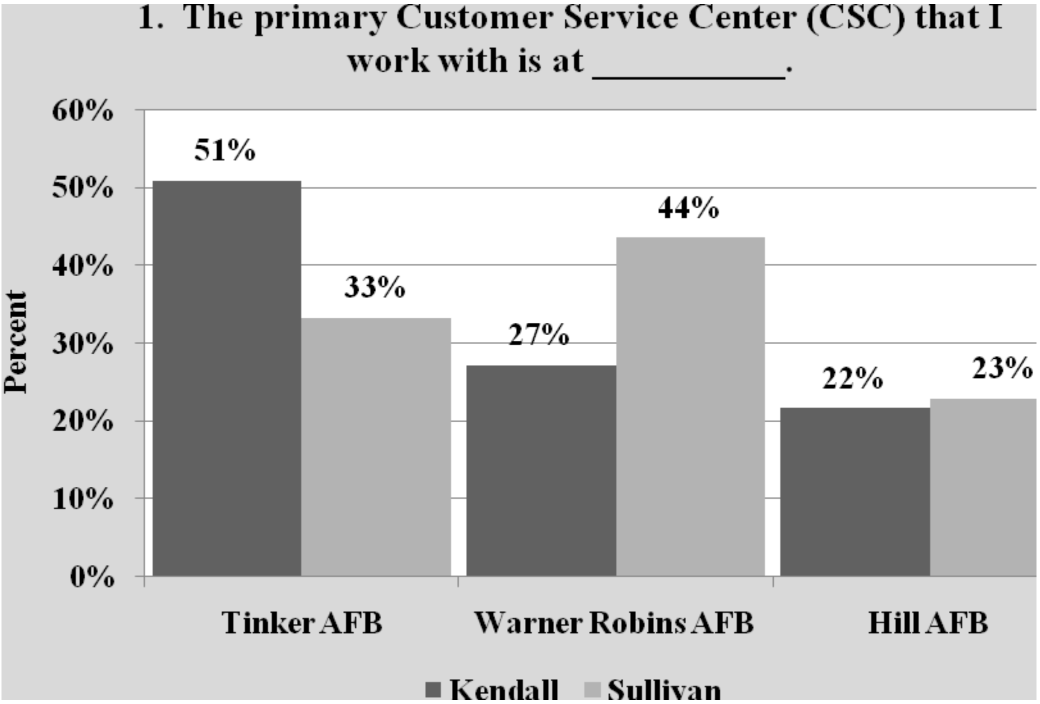

Figure 63 - Frequency Distribution: Segment One Question One Comparison.

Figure 64 provides a graphical representation of segment one, question two comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that the Sullivan (2006) survey had a much greater percentage of daily customers (37%) that responded when compared to the Kendall (2008) survey where 15% of the respondents indicated that they had contacted the CSC daily. Additionally, the Kendall (2008) survey had 29% of the respondents indicate that they contacted the CSC several times during the past year, and the Sullivan (2006) survey had 14% of the respondents indicate that they had contacted the CSC several times during the past year.

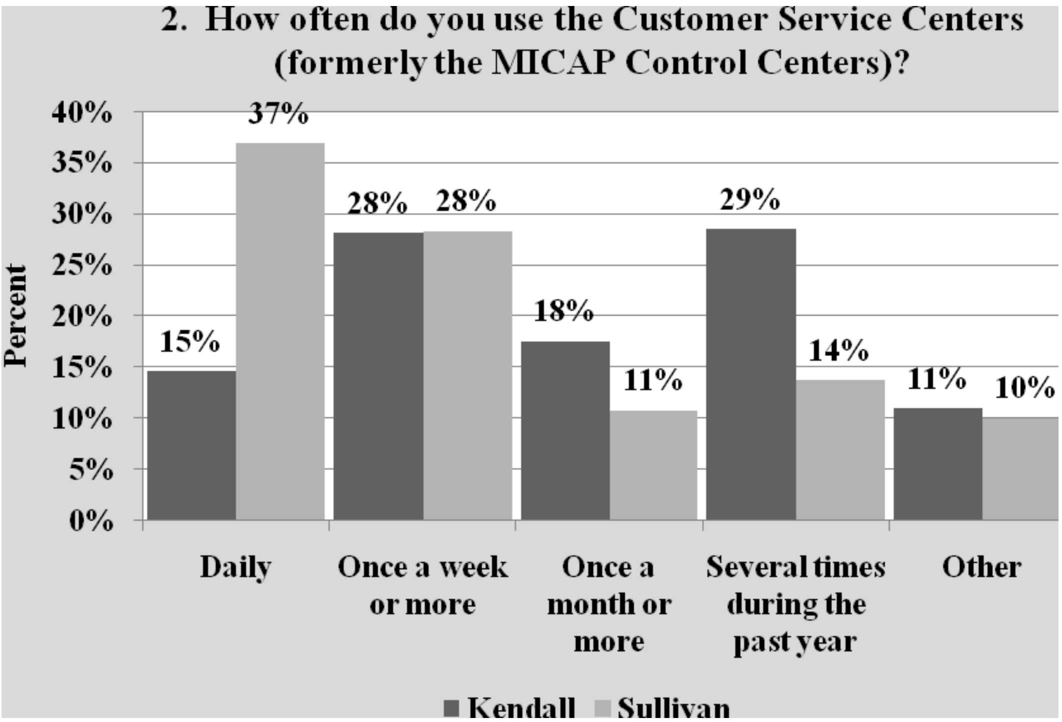

Figure 64 - Frequency Distribution: Segment One Question Two Comparison.

Figure 65 provides a graphical representation of segment one, question seven comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that a difference existed concerning what customer's calls were in support of as indicated in the figure.

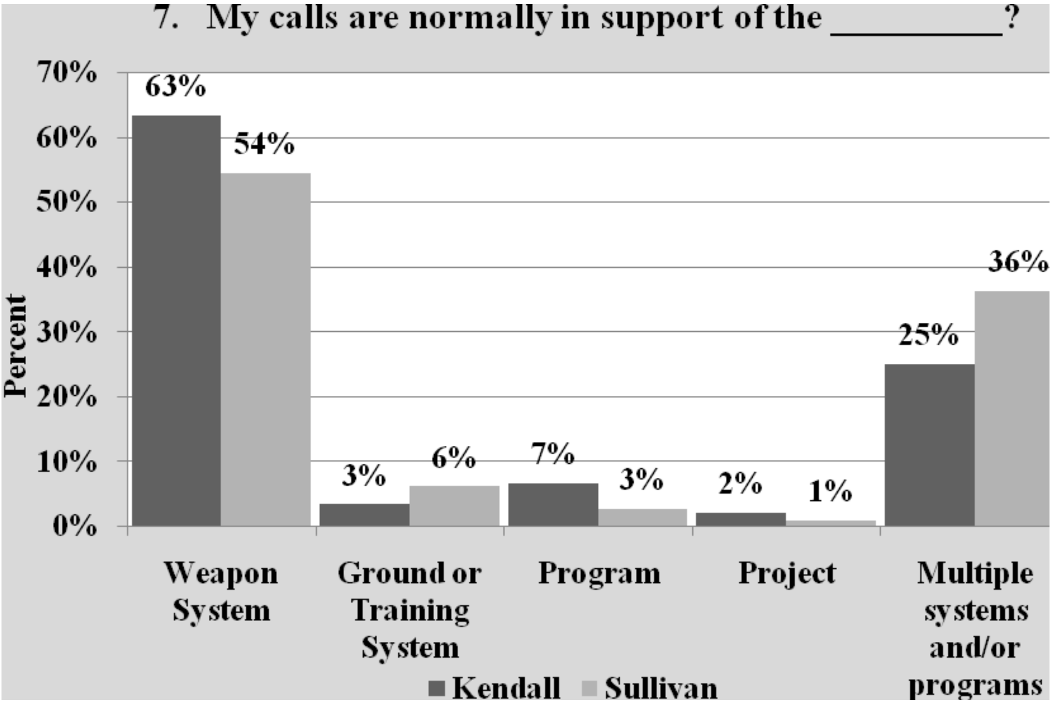

Figure 65 - Frequency Distribution: Segment One Question Seven Comparison.

Segment Two Analysis

The independent T-test analysis indicated that a significant statistical difference existed for question two: T(521) = -4.22, P = .000, and question four: T(521) = 3.04, P = .002.

2. On average, how long do you hold before you speak with a customer service representative?
   0-1 minutes
   1-2 minutes
   2-3 minutes
   3-4 minutes
   4-5 minutes
   5-6 minutes
   6+ minutes

4. I have hung up due to the length of time that was required by the CSC to answer my call.
   Yes
   No

Figure 66 provides a graphical representation of segment one, question two comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that the average hold time before speaking to a customer service representative had decreased from the time of the Sullivan (2006) survey to the Kendall (2008) survey.

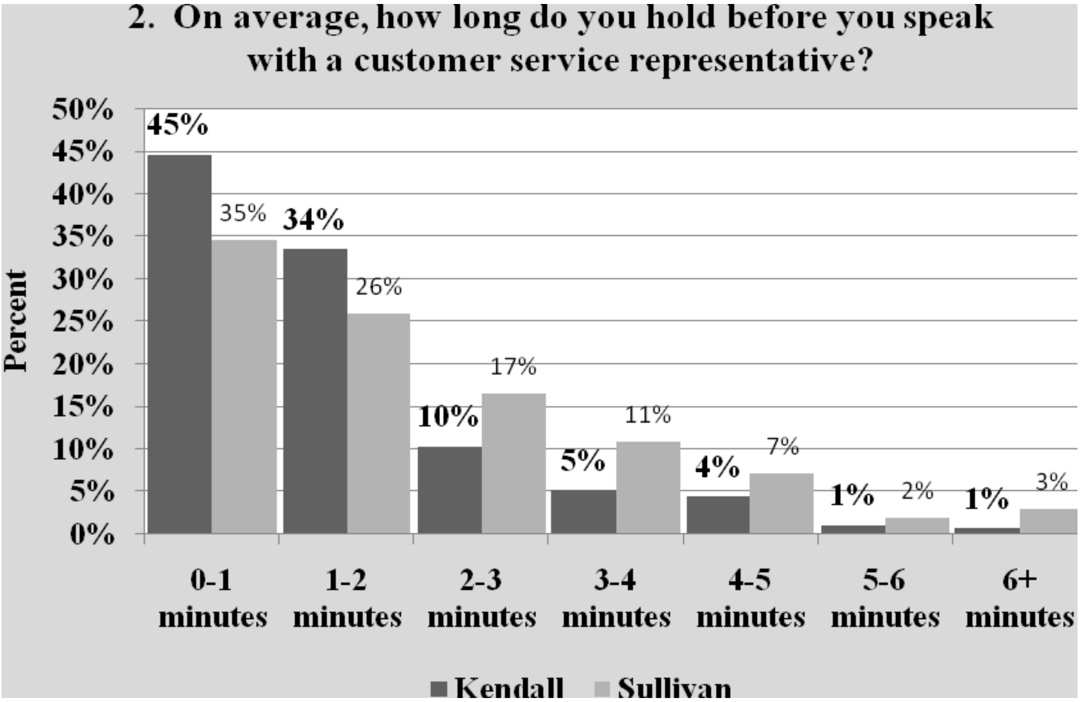

Figure 66 - Frequency Distribution: Segment Two Question Two Comparisons.

Figure 67 provides a graphical representation of segment one, question four comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that the Kendall (2008) survey respondents indicated that they hang up, due to wait times, a less percentage of the time than the Sullivan (2006) survey respondents. This could also be a result of the decrease in hold times as indicated in the previous question covered, and Figure 66.

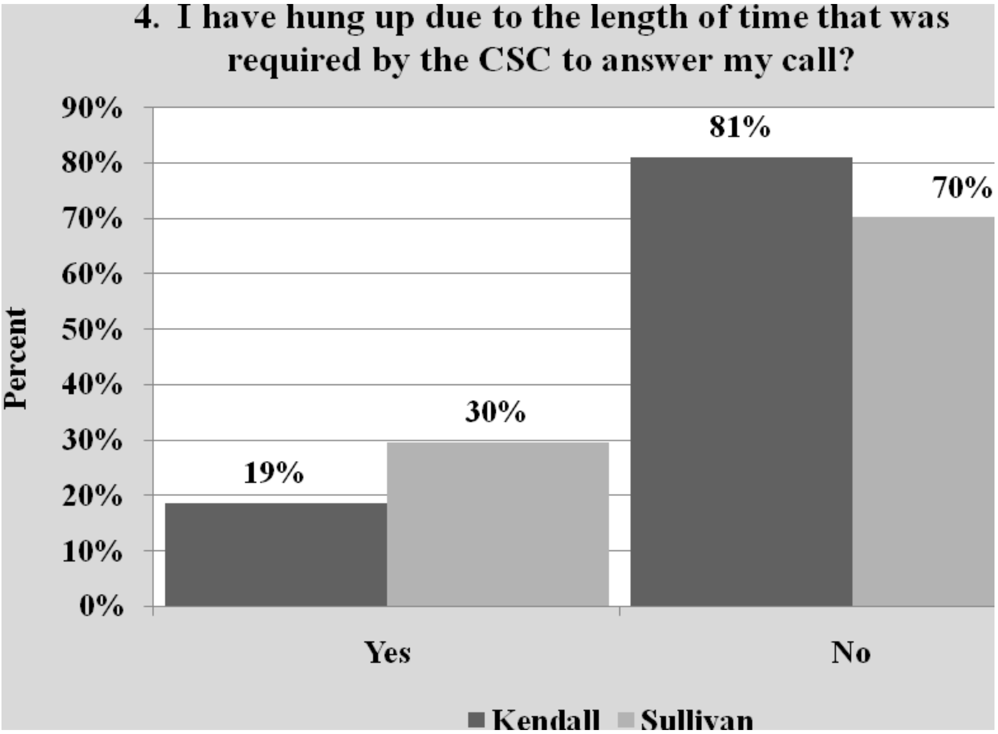

Figure 67 - Frequency Distribution: Segment Two Question Four Comparisons.

Segment Three Analysis

The independent T-test analysis indicated that a significant statistical difference existed for question two: T(532) = -2.26, P = .024, question four: T(506) = -1.76, P = .078, and question five T(532) = 2.06, P = .039.

2. What is the average length of time you are on the phone with a customer service representative?
   Less than 5 minutes
   5 to 9 minutes
   10 to 19 minutes
   20 to 29 minutes
   30 to 39 minutes
   40 minutes or longer

4. My issues are normally resolved with one phone call.
   1 2 3 4 5
   Strongly Disagree Disagree Neither Agree Strongly Agree

5. It is important to me that my issue is resolved with one phone call.
   1 2 3 4 5
   Strongly Disagree Disagree Neither Agree Strongly Agree

Figure 68 provides a graphical representation of segment one, question two comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that, on average, the Kendall (2008) respondents were on the phone, with the customer service representative, a less amount of time than the Sullivan (2006) respondents.

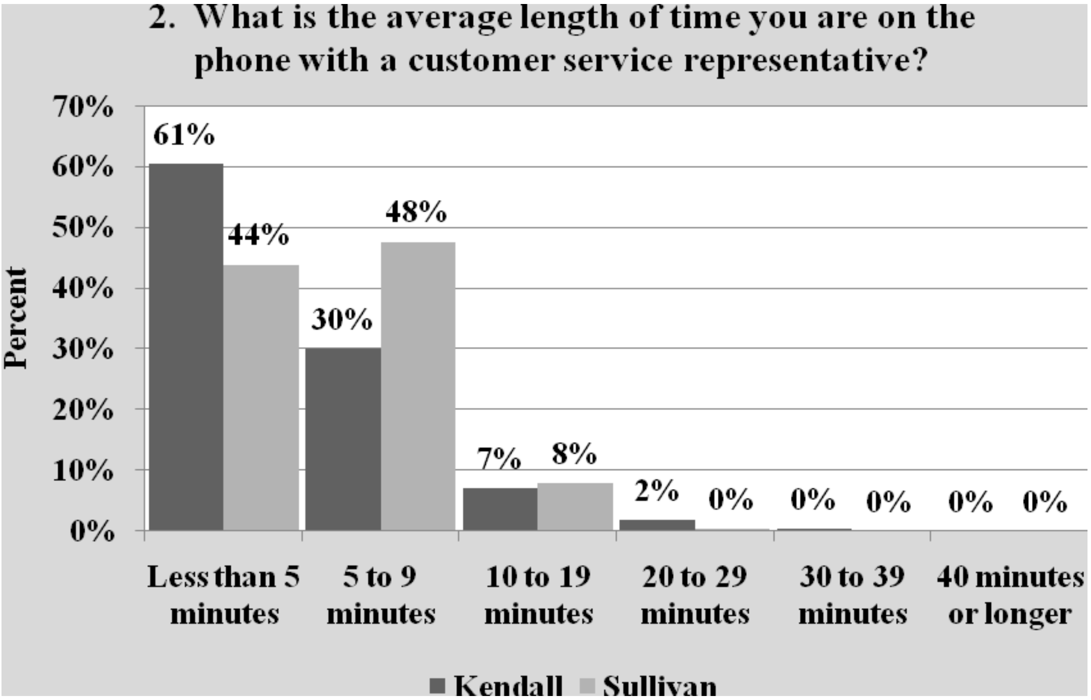

Figure 68 - Frequency Distribution: Segment Three Question Two Comparisons.

Figure 69 provides a graphical representation of segment one, question four comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that a higher percentage of the Sullivan (2006) survey respondents indicated that their issues are normally resolved with one phone call when compared to the Kendall (2008) survey. It should be noted at this point, that relative to the last questions examined, these results are counter-intuitive.

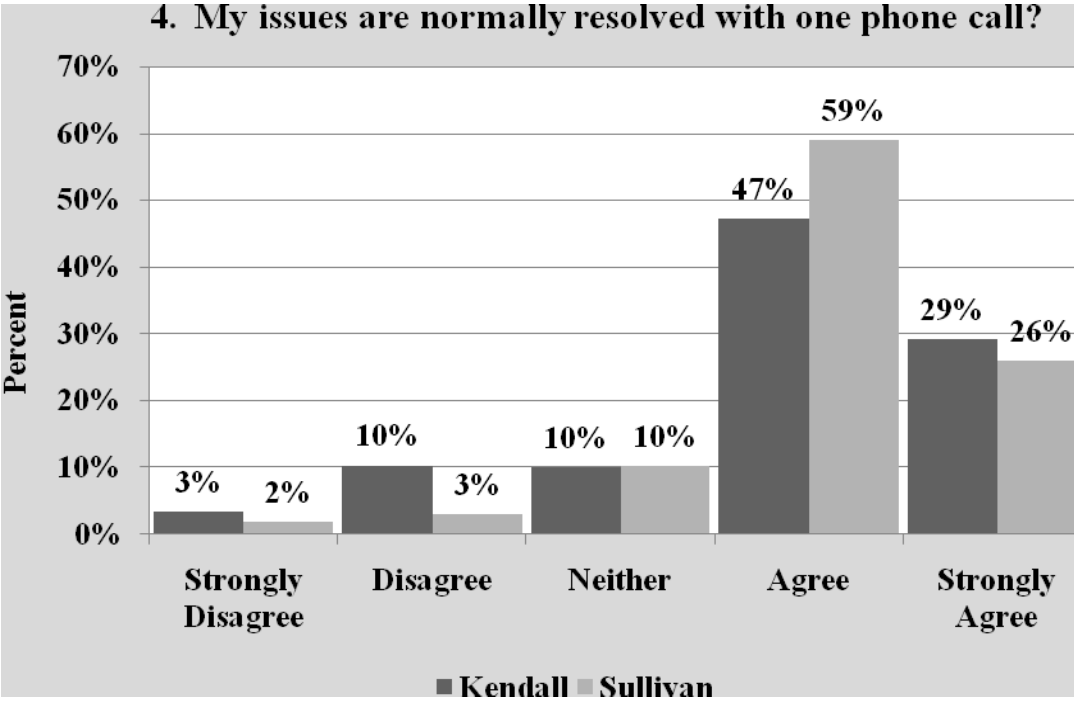

Figure 69 - Frequency Distribution: Segment Three Question Four Comparisons.

Figure 70 provides a graphical representation of segment one, question five comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that the Kendall (2008) survey respondents felt that it was more important to have their issues resolved with one phone call than the Sullivan (2006) respondents.

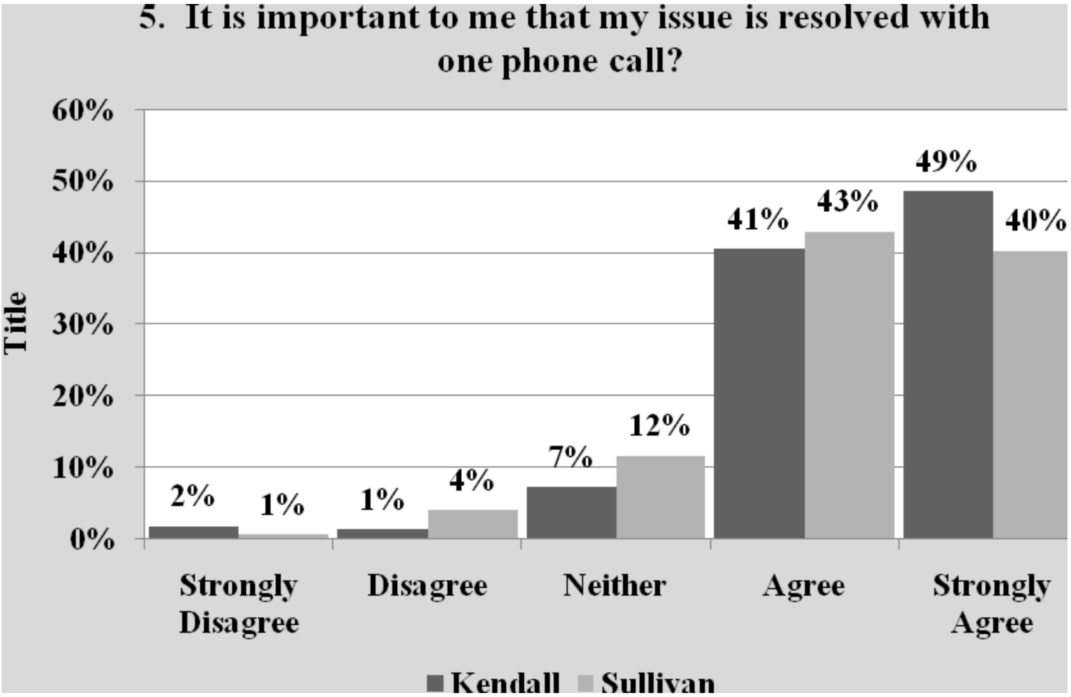

Figure 70 - Frequency Distribution: Segment Three Question Five Comparisons.

Segment Four Analysis

The independent T-test analysis indicated that a significant statistical difference existed for question ten: T(510) = -1.91, P = .056.

10. It is important to me for the CSC to keep me informed on the status of open tickets.
    1 2 3 4 5
    Strongly Disagree Disagree Neither Agree Strongly Agree

Figure 71 provides a graphical representation of segment four, question ten comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that the Sullivan (2006) survey respondents felt that it was more important for the CSC to keep them informed of the status of open tickets than the Kendall (2008) survey.

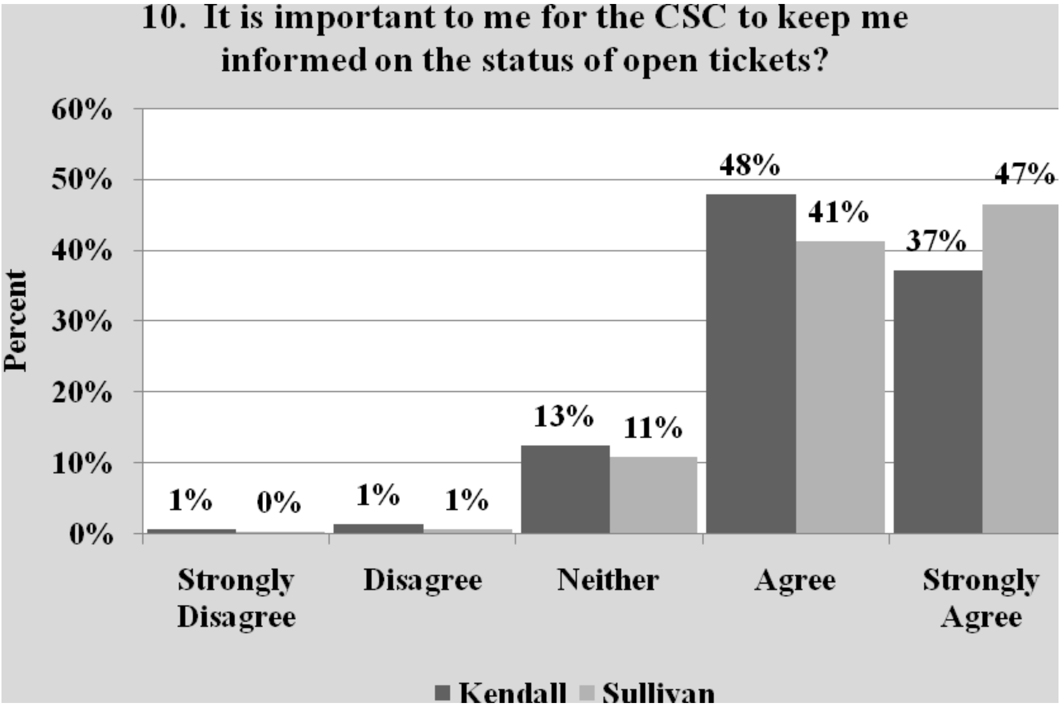

Figure 71 - Frequency Distribution: Segment Four Question Ten Comparisons.

Segment Eight Analysis

The independent T-test analysis indicated that a significant statistical difference existed for question three: T(500) = 1.67, P = .094, and question five: T(493) = -2.63, P = .009.

3. I believe the CSC is interested in my suggestions for improving their CRM initiative.
   1 2 3 4 5
   Strongly Disagree Disagree Neither Agree Strongly Agree

5. The CSC has previously surveyed me for my input on improving their processes.
   1 2 3 4 5
   Strongly Disagree Disagree Neither Agree Strongly Agree

Figure 72 provides a graphical representation of segment eight, question three comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that the Kendall (2008) respondents felt that the CSC is more interested in their suggestions for improving AFMC's CRM initiatives than the Sullivan (2006) survey respondents.

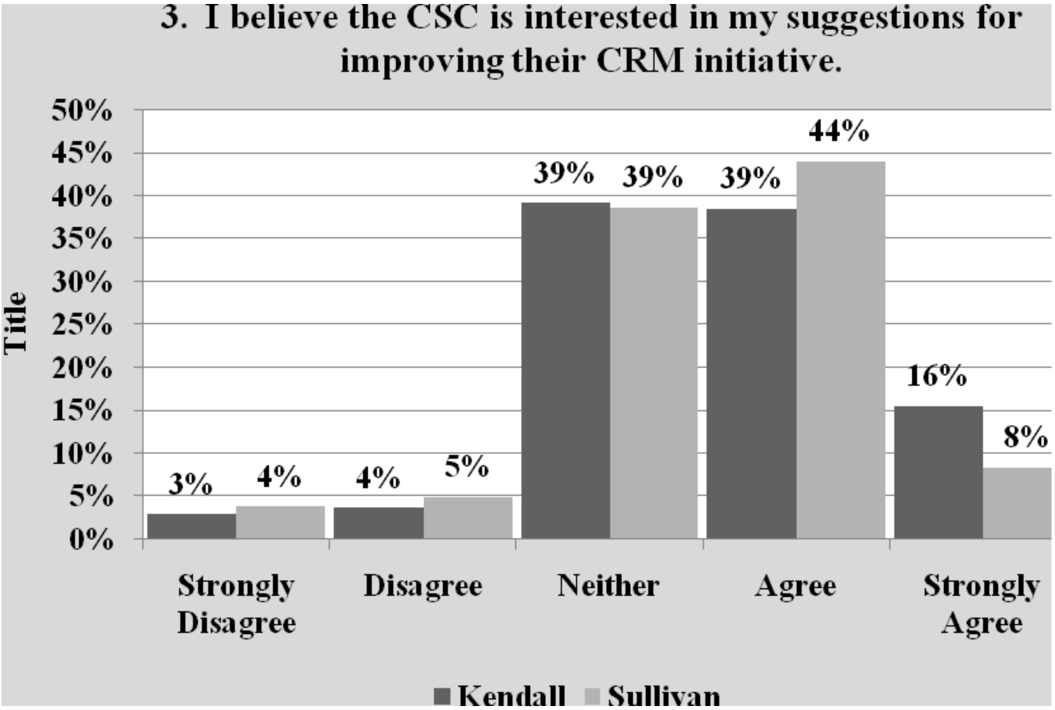

Figure 72 - Frequency Distribution: Segment Eight Question Three Comparisons.

Figure 73 provides a graphical representation of segment eight, question five comparing the Sullivan (2006) survey and the Kendall (2008) survey. Both the T-test and the graphical representation indicated that more respondents had been previously surveyed for their input on improving processes from the Sullivan (2006) survey.

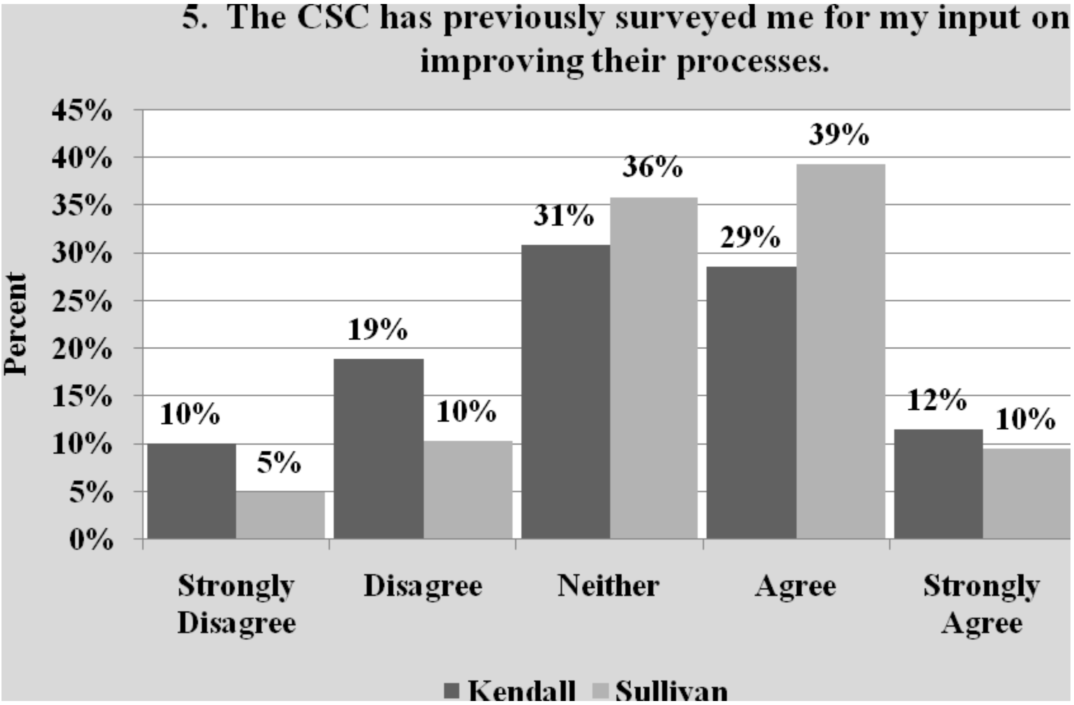

Figure 73 - Frequency Distribution: Segment Eight Question Five Comparisons.

Summary

This chapter began with a brief chapter overview followed by a description and details of the survey demographics. Frequency distributions, to provide a graphical representation of the Kendall (2008) survey, along with commentary and highlights of the results were then presented to help determine how the ALCs performed based on the criteria selected by AFMC's A4 Logistics division and the data collected from the Kendall (2008) survey. Details of the comparisons made by ALC utilizing data from the Sullivan (2006) survey were then presented, followed by comparisons by ALCs utilizing data from the Kendall (2008) survey. Lastly, a detailed comparison of the two surveys, Sullivan (2006) and Kendall (2008), was presented. The following chapter details the conclusions, findings, and recommendation for further research.

V. Conclusions

Chapter Overview

The purpose of this chapter is to present and summarize the results of this Thesis. This chapter begins with a summary of the Kendall (2008) survey results, followed by a summary of all comparisons that were made, between ALCs for each survey, and finally between the surveys. This chapter concludes with recommendations to AFMC and areas for future research. A research summary is provided.

Findings

Four investigative questions were presented at the beginning of this research focused on answering the overall research question: What are Air Force Material Command's external customer issues and satisfaction levels as measured and compared by Air Logistics Center? Each investigative question is now discussed and the findings presented for each.

The first investigative question focused on answering the overall research question was:

1. How are the ALCs performing based on the data collected from the Kendall (2008) survey criteria that were developed by AFMC's A4 Logistics division?

The frequency distributions utilized to graphically present the results of the Kendall (2008) survey demonstrated that the Customer Service Centers (CSCs) are providing consistently valuable service to the customer. A high percentage of the customer's responses were positive throughout each segment of the survey; however, relative to the other segments, segment eight demonstrated less positive results. Customer responses indicated that the CSC representatives were handling calls in a timely manner, were available at convenient times, and were professional, helpful, and friendly. The main questions of the survey dealing directly with the customer's level of satisfaction with the CSC showed similar positive results with over eighty-four percent of the participants rating the overall satisfaction level with the CSC positively. Likewise, when asked if they had other options, if they would still choose to get services from this Customer Service Center, over seventy-six percent responded positively. Additionally, the survey responses indicated that customers of the CSCs would utilize web services to retrieve information and that those customers would find web services valuable. Again, relative to the results of the other survey segments, customers did not rate segment eight as positively based on the customer's awareness and input on Customer Relationship Management (CRM) initiatives.

The second investigative question focused on answering the overall research question was:

2. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the three ALCs based on the data collected from the Kendall (2008) research survey?

While many of the questions did show a difference between the three ALCs, as presented in the previous chapter of this thesis, there were no differences in the overall customer's satisfaction levels with the CSCs when comparing questions from segment seven of the survey. Given the lack of differences concerning segment seven, it is difficult to determine if one ALC was rated higher, in terms of customer's level of satisfaction; however, it does appear, based on the results from the previous chapter, that the Tinker ALC keeps its customers on hold a less amount of time and is able to resolve the customers issue in a less amount of time. Additionally, the Tinker ALC customers were more aware of the Call Service Centers' CRM initiatives which would indicate that they were better informed. Consistent with the results of the previous investigative question examined, it appears that the Customer Service Centers (CSCs), at each of the respective ALCs, provided a valuable service to the customer.

The third investigative question focused on answering the overall research question was:

3. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the three ALCs based on data collected from the Sullivan (2006) research survey?

Just as was concluded concerning the second investigative question, comparing ALCs from the Kendall (2008) survey, when comparing ALCs from the Sullivan (2006) survey, there were no differences in the overall customer's satisfaction levels with the CSCs; however, there were differences in questions from various segments of the survey. Hill ALC customers, on average, were on hold a less amount of time than Tinker ALC and Warner Robbins ALC customers, and Hill ALC customers found their wait times more acceptable. Additionally, Warner Robbins customers spent a longer average amount of time on the phone with the customer service representative, and spent more calls to resolve customer issues. As with the comparisons made from the Kendall (2008) survey, it appears that the Customer Service Centers (CSCs), at each of the respective ALCs, provided a valuable service to the customer.

It should be noted at this point that there were no consistent differences when examining the questions that differed, among the ALCs, between the Kendall (2008) survey and the Sullivan (2006) survey. In other words, if the ALCs differed concerning one question from the Sullivan (2006) survey, that did not necessarily mean that the same question would differ from the Kendall (2008) survey.

The fourth, and final investigative question focused on answering the overall research question was:

4. How does customer satisfaction, based on the survey criteria chosen by AFMC's A4 Logistics division, compare between the data collected from the Sullivan (2006) research survey and the data collected from the Kendall (2008) research survey?

When comparing the Sullivan (2006) survey to the Kendall (2008) survey, customer responses indicate that the CSCs have improved upon a few key questions chosen to be included in the survey instrument. For example, the average hold time before speaking to a customer service representative had decreased from the time of the Sullivan (2006) survey to the Kendall (2008) survey, and less Kendall (2008) survey respondents indicated that they hang up, due to those wait times. On average, the Kendall (2008) respondents were on the phone, with the customer service representative, a less amount of time than the Sullivan (2006) respondents. Although these improvements were made in this area, no improvements in overall customer satisfaction were realized as illustrated in Figure 74.

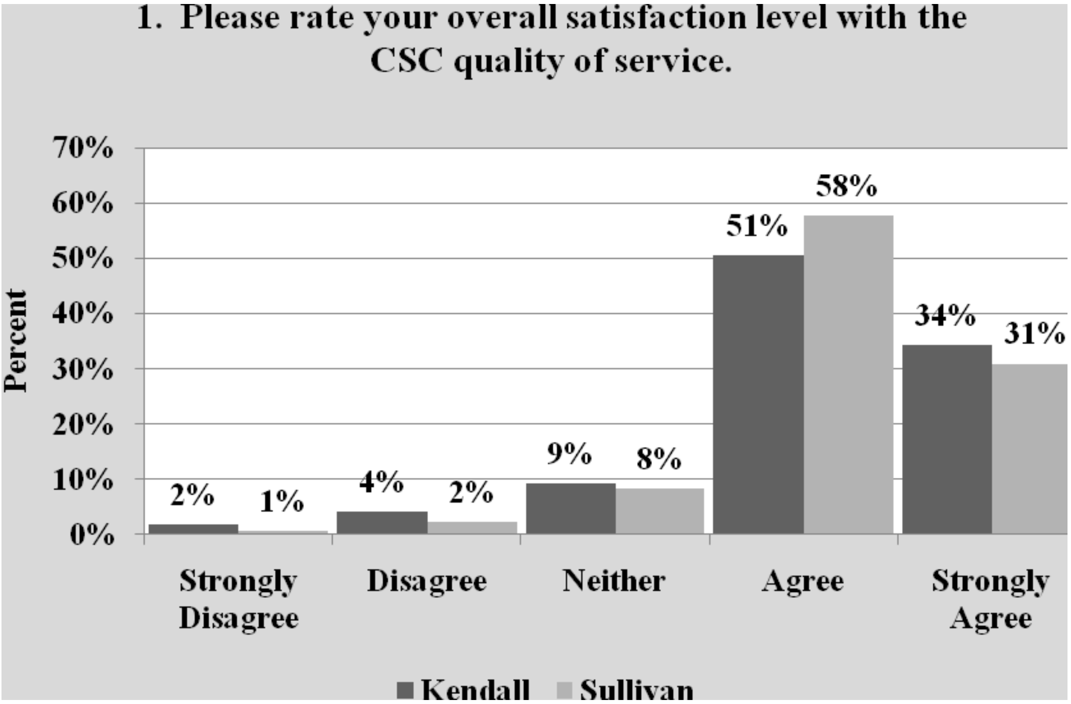

Figure 74 - Frequency Distribution: Overall Satisfaction Level with CSC.

This fact would indicate that the areas, where the improvements were made, have little to no impact on overall customer satisfaction. A potential explanation for the lack of improvement in overall customer satisfaction may involve the demographics of the survey respondents. The Sullivan (2006) survey had a much greater percentage of daily customers (37%) that responded when compared to the Kendall (2008) survey where 15% of the respondents indicated that they had contacted the CSC daily. One could speculate that daily usage customers would find areas such as call length and hold times much more important than less frequent users, and therefore would have a greater influence on their overall satisfaction levels. An alternative explanation for the lack of improvement in overall customer satisfaction may involve the number of phone calls required to resolve the customer's issue or need. A higher percentage of the Sullivan (2006) survey respondents indicated that their issues were normally resolved with one phone call when compared to the Kendall (2008) survey; however, the Kendall (2008) survey respondents felt that it was more important to have their issues resolved with one phone call than the Sullivan (2006) respondents. Additionally, several responses under the additional comments area of the survey (see VIII. Appendix C: Additional Customer Comments) indicated that customers were required to make multiple calls to the CSC so that the CSC representative can retrieve the information from the “item manager”. This area presents itself as a potential focus area for future customer satisfaction improvement initiatives.

Recommendations

As stated previously in this research, segment eight of the Kendall (2008) survey was rated with less positive results relative to the remaining segment of the survey. Segment eight dealt with the customer’s awareness and input on Customer Relationship Management (CRM) initiatives. AFMC should continue its efforts to familiarize and educate individuals on the CRM initiatives that are in place as well as the services that the CSCs offer. Additionally, as demonstrated in segment eight, AFMC should continue to seek its customer’s opinions and inputs for future improvements and CRM implementation efforts.

Secondly, as stated in (Sullivan, 2006:85) AFMC should continue to utilize the research effort of Sullivan (2006) and this current research effort as a baseline for further customer satisfaction improvement initiatives and comparisons. The combined efforts of these research initiatives provide AFMC with a solid framework for consideration in its effort to continue its Customer Relationship Management implementation.

The third recommendation is for AFMC to analyze the comparisons made between ALCs, from this research, as well as the comparisons that were made between the two surveys, and attempt to identify similarities and differences that would provide guidance for future improvement efforts. Individuals with firsthand knowledge of the operations and processes performed by the Customer Service Centers will be better able to identify the key areas where the improvements can be made when examining the similarities and differences.

The fourth and final recommendation is for AFMC to investigate the reason for the number of phone calls required to resolve the customer’s issue or needs as identified in the findings section of this chapter. As stated, this may prove to be an area for future customer satisfaction improvements efforts.

Research Summary

The purpose of this research was to help AFMC determine and improve its overall customer satisfaction. The research question that this research effort attempted to answer was: What are Air Force Material Command’s external customer issues and satisfaction levels as measured and compared by Air Logistics Center? This effort, combined with the effort of the Sullivan (2006) research, provides AFMC with a solid platform upon which to build future customer satisfaction and Customer Relationship Management initiatives.

VI. Appendix A: Web-Based Survey Questions

Sullivan Survey (2006)

Segment One - Frequency of usage/Demographics
----
1. The primary Customer Service Center (CSC) that I work with is at __________.
Tinker AFB
Warner Robins AFB
Hill AFB

2. How often do you use the Customer Service Centers (formerly the MICAP Control Centers)?
Daily
Once a week or more
Once a month or more
Several times during the past year
Other

3. How long have you been using the CSC services?
Less than 1 month
1 month to 6 months
More than 6 months

4. I am at a deployed location.
Yes
No

5. My deployed location is supporting the warfighting AOR.
Yes
No
N/A

6. My duty AFSC/job series is within
Acquisition/Program Management
Supply
Inventory Management
Equipment Management
Maintenance
Transportation
Financial Management
Other

7. My calls are normally in support of the _________
Weapon System
Ground or Training System

89
Program
Project
Multiple systems and/or programs

8. What were your reasons for the majority of your calls to CSC?
Technical inquiries
Stock Number Inquiries
Source Stock Numbers
Input Requisitions
Modify Requisitions
Request Cancellations
Shipment Status Requests
MICAPs
PDM MICAPs
Other
Please specify other

Segment Two - Length of time before reaching a Customer Service Center (CSC) agent

----

1. On average, how long do you hold before you speak with a customer service representative?
0-1 minutes
1-2 minutes
2-3 minutes
3-4 minutes
4-5 minutes
5-6 minutes
6+ minutes

2. This is an acceptable amount of time to wait for service.
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

3. I have hung up due to the length of time that was required by the CSC to answer my call.
Yes
No
90

4. I hang up approximately _______ of the time due to the length of time required to answer my call.
0-10%
11-20%
21-30%
31-40%

More than 40%

Segment Three - Call resolution parameters

----
1. What is the average length of time you are on the phone with a customer service representative?

Less than 5 minutes
5 to 9 minutes
10 to 19 minutes
20 to 29 minutes
30 to 39 minutes
40 minutes or longer

2. I am satisfied with the average time it takes the CSC to answer questions.
1 2 3 4 5

Strongly Disagree Disagree Neither Agree Strongly Agree

3. My issues are normally resolved with one phone call.
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

4. It is critical to me that my issue is resolved with one phone call.
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

Segment Four - Ability to Manage Inquiries and Provide Support (Service Level)
Use the following scale to answer these questions:
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

----
1. I am aware of the CSC services available to me.
1 2 3 4 5

2. CSC representatives were available at convenient times.
1 2 3 4 5

3. When I called the Customer Service Center (CSC), the customer service representative knows my prior call history.
1 2 3 4 5

4. I am confident about the accuracy of the information provided by the CSC.
1 2 3 4 5

5. The CSC representatives have demonstrated the ability to address my questions/issues.
1 2 3 4 5

6. The CSC delivers answers when they say they will.
1 2 3 4 5

7. If available, I would communicate with the CSC via email at least part of the time.
1 2 3 4 5

8. In order to answer my question, the CSC representatives refer me to another person approximately _____ of the time.
0%
Less than10%
11-20%
21-30%
31-40%
More than 40%

9. It is important to me for the CSC to keep me informed on the status of open tickets.
1 2 3 4 5

Segment Five - Web Services (Awareness of existing services, and desire/drive to use them)

Use the following scale to answer these questions:
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree
----
1. If available, I would access information about CSC services using the Internet.
1 2 3 4 5

2. It would be valuable to me to be able to track the status of a question via a web page
1 2 3 4 5

3. I would like a web-based service to be provided.
1 2 3 4 5

4. I would prefer to query the CSC the following way(s). (Please mark all answers that apply.)
By Telephone
Through a Web-Site
Using Email
Through an Instant Messaging Capability

Segment Six – Satisfaction Level with CSC Representatives

Use the following scale to answer these questions:
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

----

1. The CSC representative was professional.
1 2 3 4 5

2. The CSC representative was helpful.
1 2 3 4 5

3. The CSC representative was friendly.
1 2 3 4 5

4. The CSC representative understood my question/needs.
1 2 3 4 5

5. The CSC representative understood the urgency of my request.
1 2 3 4 5

Segment Seven – Overall Satisfaction with the Customer Service Center (CSC)

Use the following scale to answer these questions:
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

----

1. Please rate your overall satisfaction level with the CSC quality of service.
1 2 3 4 5

2. If I had other options, I would still choose to get services from this Customer Service Center.
1 2 3 4 5

Segment Eight – Awareness and Customer Input on CRM Initiative

----

1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

----

1. I am aware Customer Relationship Management (CRM) is a transformation initiative that includes the CSC.
1 2 3 4 5

2. I was aware of the Call Service Centers' CRM initiative before it began.
1 2 3 4 5

3. I believe the CSC is interested in my suggestions for improving their CRM initiative.
1 2 3 4 5

4. I believe the CSC has used suggestions from their customers to improve their CSC operations.
1 2 3 4 5

5. The CSC has surveyed me for my input on improving their processes.
1 2 3 4 5

6. I can see the results of my inputs over time.
1 2 3 4 5

7. The CSC has continued to update me on the progress of their CRM initiatives.
1 2 3 4 5

Kendall Survey (2008)

Segment One - Frequency of usage/Demographics
----
1. The primary Customer Service Center (CSC) that I work with is at __________.
Tinker AFB
Warner Robins AFB
Hill AFB

2. How often do you use the Customer Service Centers (formerly the MICAP Control Centers)?
Daily
Once a week or more
Once a month or more
Several times during the past year
Please specify other ________

3. How long have you been using the CSC services?
Less than 1 month
1 month to 6 months
More than 6 months

4. I am at a deployed location.
Yes
No

5. If you answered yes to the previous question, then please indicate if your deployed location is supporting the warfighting AOR.
Yes
No

N/A

6. My duty AFSC/job series is within
Acquisition/Program Management
Supply
Inventory Management
Equipment Management
Maintenance
Transportation
Financial Management
Please specify other ________

7. My calls are normally in support of the _________
Weapon System
Ground or Training System
Program
Project
Multiple systems and/or programs
Please specify other ________

8. What were your reasons for the majority of your calls to CSC? (Please indicate all that apply).
Technical inquiries
Stock Number Inquiries
Source Stock Numbers
Input Requisitions
Modify Requisitions
Request Cancellations
Shipment Status Requests
MICAPs
PDM MICAPs
Other
Please specify other

Segment Two - Length of time before reaching a Customer Service Center (CSC) agent
----
1. During your most recent call, how long did you hold before you spoke with a customer service representative?
0-1 minutes
1-2 minutes
2-3 minutes
3-4 minutes
4-5 minutes
5-6 minutes
6+ minutes

2. On average, how long do you hold before you speak with a customer service representative?
0-1 minutes
1-2 minutes
2-3 minutes
3-4 minutes
4-5 minutes
5-6 minutes
6+ minutes

3. This is an acceptable amount of time to wait for service.
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

4. I have hung up due to the length of time that was required by the CSC to answer my call.
Yes
No
90

5. I hang up approximately _______ of the time due to the length of time required to answer my call.
0-10%
11-20%
21-30%
31-40%
More than 40%

Segment Three - Call resolution parameters
----
1. During your most recent call, how long were you on the phone with the customer service representative?
Less than 5 minutes
5 to 9 minutes
10 to 19 minutes
20 to 29 minutes
30 to 39 minutes
40 minutes or longer

2. What is the average length of time you are on the phone with a customer service representative?
Less than 5 minutes
5 to 9 minutes
10 to 19 minutes
20 to 29 minutes
30 to 39 minutes

40 minutes or longer

3. The CSC answers my questions in a timely manner.
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

4. My issues are normally resolved with one phone call.
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

5. It is critical to me that my issue is resolved with one phone call.
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

Segment Four - Ability to Manage Inquiries and Provide Support (Service Level)
Use the following scale to answer these questions:
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree
----
1. I am aware of the CSC services available to me.
1 2 3 4 5

2. CSC representatives were available at convenient times.
1 2 3 4 5

3. When I called the Customer Service Center (CSC), the customer service representative knows my prior call history.
1 2 3 4 5

4. I am confident about the accuracy of the information provided by the CSC.
1 2 3 4 5

5. The CSC representatives have demonstrated the ability to address my questions/issues.
1 2 3 4 5

6. The CSC is proactive when helping me resolve a problem/issue.
1 2 3 4 5

7. The CSC delivers answers when they say they will.
1 2 3 4 5

8. If available, I would communicate with the CSC via email at least part of the time.
1 2 3 4 5

9. In order to answer my question, the CSC representatives refer me to another person approximately _____ of the time.

0%
Less than10%
11-20%
21-30%
31-40%
More than 40%

10. It is important to me for the CSC to keep me informed on the status of open tickets.
1 2 3 4 5

11. The CSC does a good job keeping me informed on the status of open tickets.
1 2 3 4 5

Segment Five - Web Services (Awareness of existing services, and desire/drive to use them)

Use the following scale to answer these questions:
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree
----
1. If available, I would access information about CSC services using the Internet.
1 2 3 4 5

2. It would be valuable to me to be able to track the status of a question via a web page
1 2 3 4 5

3. I would like a web-based service to be provided.
1 2 3 4 5

4. I would like to use the internet for the following services. (Please indicate all that apply).

0 Technical inquiry
0 Stock Number Inquiry
0 Source Stock Number
0 Modify Requisition
0 Request Cancellation
0 Shipment Status Request
0 MICAP
0 PDM MICAP
0 Other
Please specify other ________

5. I would prefer to query the CSC the following way(s). (Please mark all answers that apply.)
By Telephone

Through a Web-Site
Using Email
Through an Instant Messaging Capability

Segment Six – Satisfaction Level with CSC Representatives

Use the following scale to answer these questions:
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

----

1. In general, the CSC representative was professional.
1 2 3 4 5

2. In general, the CSC representative was helpful.
1 2 3 4 5

3. In general, the CSC representative was friendly.
1 2 3 4 5

4. In general, the CSC representative understood my question/needs.
1 2 3 4 5

5. In general, the CSC representatives are knowledgeable.
1 2 3 4 5

6. In general, the CSC representative understood the urgency of my request.
1 2 3 4 5

7. In general, the CSC notifies me in advance when there is an issue/problem with my order.
1 2 3 4 5 N/A

Segment Seven – Overall Satisfaction with the Customer Service Center (CSC)

Use the following scale to answer these questions:
1 2 3 4 5
Strongly Disagree Disagree Neither Agree Strongly Agree

----

1. Please rate your overall satisfaction level with the CSC quality of service.
1 2 3 4 5

2. If I had other options, I would still choose to get services from this Customer Service Center.
1 2 3 4 5

Segment Eight – Awareness and Customer Input on CRM Initiative

----

1 2 3 4 5

Strongly Disagree Disagree Neither Agree Strongly Agree

----

1. I am aware that Customer Relationship Management (CRM) is a transformation initiative that includes the CSC.
1 2 3 4 5

2. I was aware of the Call Service Centers' CRM initiative before it began.
1 2 3 4 5

3. I believe the CSC is interested in my suggestions for improving their CRM initiative.
1 2 3 4 5

4. I believe the CSC has used suggestions from their customers to improve their CSC operations.
1 2 3 4 5

5. The CSC has previously surveyed me for my input on improving their processes.
1 2 3 4 5

6. I can see the results of my inputs over time.
1 2 3 4 5

7. The CSC has continued to update me on the progress of their CRM initiatives.
1 2 3 4 5

Please provide any additional comments/concerns…Your opinion is very important to us!

____

____

VII. Appendix B: Results of Statistical Analysis

ANOVA Tests Results: Comparison by ALC Utilizing Data from the Kendall (2008) Survey

ANOVA – Segment One

Segment 1		Sum of Squares	df	Mean Square	F	Sig.
S1 Q2	Between Groups	3.283	2	1.641	1.062	.347
S1 Q3	Between Groups	1.182	2	.591	2.045	.132
S1 Q4	Between Groups	.043	2	.022	1.117	.329
S1 Q6	Between Groups	10.612	2	5.306	1.788	.169
S1 Q7	Between Groups	3.413	2	1.706	.438	.646

ANOVA – Segment Two

Segment 2		Sum of Squares	df	Mean Square	F	Sig.
S2 Q1	Between Groups	6.501	2	3.250	1.920	.149
S2 Q2	Between Groups	11.663	2	5.831	3.813	.023
S2 Q3	Between Groups	3.830	2	1.915	1.623	.199
S2 Q4	Between Groups	.032	2	.016	.106	.899
S2 Q5	Between Groups	1.201	2	.600	1.366	.257

Tukey Analysis – Segment Two

Dep. Var.	(I) ALC	(J) ALC	Mean Difference (I-J)	Std. Error	Sig.	90% Confidence Interval	
						Upper Bound	Lower Bound
S2 Q2	1	2	-.239	.185	.401	-.62	.14
		3	-.547*	.201	.019	-.96	-.13
	2	1	.239	.185	.401	-.14	.62
		3	-.308	.225	.357	-.77	.15

*. The mean difference is significant at the 0.1 level.

ANOVA – Segment Three

Segment 3		Sum of Squares	df	Mean Square	F	Sig.
S3 Q1	Between Groups	3.407	2	1.704	2.608	.076
S3 Q2	Between Groups	6.829	2	3.415	6.496	.002
S3 Q3	Between Groups	.345	2	.172	.172	.842
S3 Q4	Between Groups	1.496	2	.748	.681	.507
S3 Q5	Between Groups	1.187	2	.593	.885	.414

Tukey Analysis – Segment Three

Dep. Var.	(I) ALC	(J) ALC	Mean Difference (I-J)	Std. Error	Sig.	90% Confidence Interval	
						Upper Bound	Lower Bound
S3 Q1	1	2	-.257*	.121	.086	-.51	-.01
		3	-.194	.132	.307	-.47	.08
	2	1	.257*	.121	.086	.01	.51
		3	.063	.148	.905	-.24	.37
S3 Q2	1	2	-.389*	.108	.001	-.61	-.17
		3	-.097	.119	.693	-.34	.15
	2	1	.389*	.108	.001	.17	.61
		3	.292*	.132	.072	.02	.57

*. The mean difference is significant at the 0.1 level.

ANOVA – Segment Four

Segment 4		Sum of Squares	df	Mean Square	F	Sig.
S4 Q1	Between Groups	.903	2	.452	.473	.623
S4 Q2	Between Groups	2.114	2	1.057	1.610	.202
S4 Q3	Between Groups	1.003	2	.501	.587	.557
S4 Q4	Between Groups	.015	2	.008	.010	.990
S4 Q5	Between Groups	.858	2	.429	.605	.547
S4 Q6	Between Groups	1.659	2	.829	.982	.376
S4 Q7	Between Groups	3.132	2	1.566	2.242	.108
S4 Q8	Between Groups	1.491	2	.746	.729	.484
S4 Q9	Between Groups	2.674	2	1.337	.582	.560
S4 Q10	Between Groups	.515	2	.257	.426	.653
S4 Q11	Between Groups	4.008	2	2.004	2.249	.108

ANOVA – Segment Five

Segment 5		Sum of Squares	df	Mean Square	F	Sig.
S5 Q1	Between Groups	4.068	2	2.034	2.477	.086
S5 Q2	Between Groups	5.784	2	2.892	3.463	.033
S5 Q3	Between Groups	4.637	2	2.319	2.598	.076

Tukey Analysis – Segment Five

Dep. Var.	(I) ALC	(J) ALC	Mean Difference (I-J)	Std. Error	Sig.	90% Confidence Interval	
						Lower Bound	Upper Bound
S5 Q1	1	2	-.283(*)	.136	.095	-.56	.00
		3	-.205	.146	.341	-.51	.10
	2	1	.283(*)	.136	.095	.00	.56
		3	.079	.164	.882	-.26	.42
S5 Q2	1	2	-.334(*)	.137	.041	-.62	-.05
		3	-.255	.147	.197	-.56	.05
	2	1	.334(*)	.137	.041	.05	.62
		3	.079	.166	.881	-.26	.42
S5 Q3	1	2	-.279	.142	.122	-.57	.01
		3	-.263	.152	.198	-.58	.05
	2	1	.279	.142	.122	-.01	.57
		3	.016	.171	.995	-.34	.37

*. The mean difference is significant at the 0.1 level.

ANOVA – Segment Six

Segment 6		Sum of Squares	df	Mean Square	F	Sig.
S6 Q1	Between Groups	1.636	2	.818	2.088	.126
S6 Q2	Between Groups	.630	2	.315	.583	.559
S6 Q3	Between Groups	1.961	2	.980	2.161	.117
S6 Q4	Between Groups	.303	2	.151	.236	.790
S6 Q5	Between Groups	.139	2	.070	.096	.909
S6 Q6	Between Groups	2.276	2	1.138	1.419	.244
S6 Q7	Between Groups	4.707	2	2.353	2.066	.129

ANOVA – Segment Seven

Segment 7		Sum of Squares	df	Mean Square	F	Sig.
S7 Q1	Between Groups	.376	2	.188	.248	.780
S7 Q2	Between Groups	.046	2	.023	.022	.979

ANOVA – Segment Eight

Segment 8		Sum of Squares	df	Mean Square	F	Sig.
S8_Q1	Between Groups	3.265	2	1.633	1.401	.248
S8_Q2	Between Groups	6.258	2	3.129	2.715	.068
S8_Q3	Between Groups	3.198	2	1.599	2.009	.136
S8_Q4	Between Groups	2.644	2	1.322	1.979	.140
S8_Q5	Between Groups	6.139	2	3.069	2.349	.098
S8_Q6	Between Groups	2.038	2	1.019	1.385	.252
S8_Q7	Between Groups	3.626	2	1.813	2.051	.131

Tukey Analysis – Segment Eight

Dep. Var.	(I) ALC	(J) ALC	Mean Difference (I-J)	Std. Error	Sig.	90% Confidence Interval	
						Lower Bound	Upper Bound
S8_Q2	1	2	.258	.161	.247	-.07	.59
		3	.367*	.173	.088	.01	.72
	2	1	-.258	.161	.247	-.59	.07
		3	.109	.195	.841	-.29	.51
S8_Q5	3	1	-.367*	.173	.083	-.72	-.01
		2	-.109	.195	.841	-.51	.29
	1	2	.168	.173	.595	-.19	.53
		3	.396*	.184	.083	.02	.78

ANOVA Tests Results: Comparison by ALC Utilizing Data from the Sullivan (2006) Survey

ANOVA – Segment One

Segment 1		Sum of Squares	df	Mean Square	F	Sig.
S1 Q2	Between Groups	2.480	2	1.240	.680	.508
S1 Q3	Between Groups	2.159	2	1.079	4.115	.017
S1 Q4	Between Groups	.077	2	.038	2.008	.136
S1 Q5	Between Groups	.308	2	.154	.531	.589
S1 Q6	Between Groups	3.334	2	1.667	1.306	.273
S1 Q7	Between Groups	.596	2	.298	.084	.920

Tukey Analysis – Segment One

Dep. Var.	(I) ALC	(J) ALC	Mean Difference (I-J)	Std. Error	Sig.	90% Confidence Interval	
						Lower Bound	Upper Bound
S1 Q3	1	2	-.119	.074	.243	-.27	.03
		3	-.249*	.087	.013	-.43	-.07
	2	1	.119	.074	.243	-.03	.27
		3	-.130	.082	.260	-.30	.04

*. The mean difference is significant at the 0.1 level.

ANOVA – Segment Two

Segment 2		Sum of Squares	df	Mean Square	F	Sig.
S2 Q1	Between Groups	22.622	2	11.311	4.759	.009
S2 Q2	Between Groups	7.069	2	3.534	3.287	.039
S2 Q3	Between Groups	.622	2	.311	1.469	.232
S2 Q4	Between Groups	.721	2	.360	1.031	.358

Tukey Analysis – Segment Two

Dep. Var.	(I) ALC	(J) ALC	Mean Difference (I-J)	Std. Error	Sig.	90% Confidence Interval	
						Lower Bound	Upper Bound
S2 Q1	1	2	-.357	.223	.245	-.82	.10
		3	.395	.261	.285	-.14	.93
	2	1	.357	.223	.245	-.10	.82
		3	.752*	.247	.007	.24	1.26
S2 Q2	1	2	-.054	.150	.932	-.36	.25
		3	-.419*	.175	.046	-.78	-.06
	2	1	.054	.150	.932	-.25	.36
		3	-.365*	.166	.073	-.71	-.02

*. The mean difference is significant at the 0.1 level.

ANOVA - Segment Three

Segment 3		Sum of Squares	df	Mean Square	F	Sig.
S3 Q1	Between Groups	4.520	2	2.260	5.948	.003
S3 Q2	Between Groups	2.045	2	1.023	1.594	.205
S3 Q3	Between Groups	7.669	2	3.834	4.167	.017
S3 Q4	Between Groups	1.835	2	.917	1.290	.277

Tukey Analysis – Segment Three

Dep. Var.	(I) ALC	(J) ALC	Mean Difference (I-J)	Std. Error	Sig.	90% Confidence Interval	
						Lower Bound	Upper Bound
S3 Q1	1	2	-.230*	.089	.027	-.41	-.05
		3	.077	.105	.746	-.14	.29
	2	1	.230*	.089	.027	.05	.41
		3	.307*	.099	.006	.10	.51
S3 Q3	1	2	.370*	.138	.021	.09	.65
		3	.061	.164	.926	-.28	.40
	2	1	-.370*	.138	.021	-.65	-.09
		3	-.309	.155	.115	-.63	.01

*. The mean difference is significant at the 0.1 level.

ANOVA – Segment Four

Segment 4		Sum of Squares	df	Mean Square	F	Sig.
S4 Q1	Between Groups	.437	2	.218	.345	.708
S4 Q2	Between Groups	1.348	2	.674	1.099	.335
S4 Q3	Between Groups	.911	2	.456	.565	.569
S4 Q4	Between Groups	.555	2	.278	.450	.638
S4 Q5	Between Groups	1.002	2	.501	.777	.461
S4 Q6	Between Groups	1.611	2	.806	1.057	.349
S4 Q7	Between Groups	1.629	2	.814	.755	.471
S4 Q8	Between Groups	4.069	2	2.035	1.068	.345
S4 Q9	Between Groups	1.257	2	.628	1.199	.303

ANOVA – Segment Five

Segment 5		Sum of Squares	df	Mean Square	F	Sig.
S5 Q1	Between Groups	.186	2	.093	.237	.789
S5 Q2	Between Groups	.301	2	.150	.319	.727
S5 Q3	Between Groups	.946	2	.473	1.163	.314
S5 Q4	Between Groups	.337	2	.169	.247	.781
S5 Q5	Between Groups	1.161	2	.581	.785	.457

ANOVA - Segment Six

Segment 6		Sum of Squares	df	Mean Square	F	Sig.
S6 Q1	Between Groups	.186	2	.093	.237	.789
S6 Q2	Between Groups	.301	2	.150	.319	.727
S6 Q3	Between Groups	.946	2	.473	1.163	.314
S6 Q4	Between Groups	.337	2	.169	.247	.781
S6 Q5	Between Groups	1.161	2	.581	.785	.457

ANOVA – Segment Seven

Segment 7		Sum of Squares	df	Mean Square	F	Sig.
S7 Q1	Between Groups	1.238	2	.619	1.154	.317
S7 Q2	Between Groups	2.131	2	1.066	1.294	.276

ANOVA – Segment Eight

Segment 8		Sum of Squares	df	Mean Square	F	Sig.
S8 Q1	Between Groups	4.736	2	2.368	2.133	.121
S8 Q2	Between Groups	2.150	2	1.075	.973	.379
S8 Q3	Between Groups	.386	2	.193	.252	.777
S8 Q4	Between Groups	.129	2	.065	.094	.911
S8 Q5	Between Groups	1.967	2	.984	1.013	.365
S8 Q6	Between Groups	1.229	2	.615	.720	.488
S8 Q7	Between Groups	.272	2	.136	.138	.871

Paired-Samples T-test: Comparison by Sullivan (2006) Survey Data and the Kendall (2008) Survey Data

Group Statistics – Segment One

	Group	N	Mean	Std. Deviation	Std. Error Mean
S1 Q1	0	212	1.71	.795	.055
	1	256	1.91	.746	.047
S1 Q2	0	212	2.80	1.192	.082
	1	256	2.29	1.347	.084
S1 Q3	0	212	2.82	.493	.034
	1	256	2.78	.518	.032
S1 Q4	0	212	1.98	.136	.009
	1	256	1.98	.139	.009
S1 Q6	0	212	2.33	.925	.064
	1	256	2.36	1.129	.071
S1 Q7	0	212	2.10	1.672	.115
	1	256	2.57	1.877	.117

Independent Samples Test – Segment One

		Levene's		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	90% Con. Int.	
									Lower	Upper
S1 Q1	Eq. var. not assumed	9.683	.002	-2.70	437.9	.007	-.194	.072	-.312	-.076
S1 Q2	Eq. var. assumed	2.113	.147	4.31	466	.000	.513	.119	.317	.709
S1 Q3	Eq. var. not assumed	2.618	.106	.927	457.0	.354	.043	.047	-.034	.121
S1 Q4	Eq. var. assumed	.011	.917	.052	466	.959	.001	.013	-.020	.022
S1 Q6	Eq. var. assumed	.332	.565	-.391	466	.696	-.038	.097	-.197	.122
S1 Q7	Eq. var. assumed	26.388	.000	-2.81	466	.005	-.467	.166	-.740	-.193

Group Statistics – Segment Two

	Group	N	Mean	Std. Deviation	Std. Error Mean
S2 Q2	0	261	1.97	1.232	.076
	1	262	2.48	1.560	.096
S2 Q3	0	261	3.96	1.098	.068
	1	262	3.84	1.043	.064
S2 Q4	0	261	1.81	.391	.024
	1	262	1.70	.460	.028
S2 Q5	0	261	1.21	.659	.041
	1	262	1.17	.596	.037

Independent Samples Test – Segment Two

		Levene's		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	90% Con. Int. Lower	90% Con. Int. Upper
S2 Q2	Eq. var. assumed	27.333	.000	-4.22	521	.000	-.519	.123	-.722	-.317
S2 Q3	Eq. var. not assumed	.115	.735	1.34	519.4	.180	.126	.094	-.029	.280
S2 Q4	Eq. var. assumed	38.000	.000	3.04	521	.002	.114	.037	.052	.175
S2 Q5	Eq. var. not assumed	1.886	.170	.709	515.4	.478	.039	.055	-.052	.129

Group Statistics – Segment Three

	Group	N	Mean	Std. Deviation	Std. Error Mean
S3 Q2	0	269	1.51	.741	.045
	1	265	1.65	.641	.039
S3 Q4	0	269	3.90	1.034	.063
	1	265	4.04	.808	.050
S3 Q5	0	269	4.33	.823	.050
	1	265	4.18	.851	.052

Independent Samples Test – Segment Three

		Levene's		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	90% Con. Int. Lower	90% Con. Int. Upper
S3 Q2	Eq. var. assumed	3.077	.080	-2.26	532	.024	-.136	.060	-.235	-.037
S3 Q4	Eq. var. not assumed	17.090	.000	-1.76	506	.078	-.142	.080	-.274	-.010
S3 Q5	Eq. var. assumed	.045	.832	2.06	532	.039	.150	.072	.030	.269

Group Statistics – Segment Four

	Group	N	Mean	Std. Deviation	Std. Error Mean
S4 Q1	0	260	3.94	.963	.060
	1	252	4.03	.800	.050
S4 Q2	0	260	4.08	.802	.050
	1	252	4.03	.778	.049
S4 Q3	0	260	3.63	.919	.057
	1	252	3.69	.910	.057
S4 Q4	0	260	3.96	.893	.055
	1	252	3.97	.778	.049
S4 Q5	0	260	4.00	.822	.051
	1	252	4.01	.793	.050
S4 Q7	0	260	3.92	.848	.053
	1	252	3.85	.864	.054
S4 Q8	0	260	3.83	.998	.062
	1	252	3.76	1.041	.066
S4 Q9	0	260	2.47	1.500	.093
	1	252	2.52	1.373	.086
S4 Q10	0	260	4.22	.762	.047
	1	252	4.35	.722	.046

Independent Samples Test – Segment Four

		Levene's		t-test for Equality of Means						
								Std.	90% Con. Int.	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Error Diff.	Lower	Upper
S4 Q1	Eq. var. not assumed	4.726	.030	-1.09	498.4	.275	-.085	.078	-.214	.043
S4 Q2	Eq. var. assumed	.595	.441	.647	510	.518	.045	.070	-.070	.160
S4 Q3	Eq. var. assumed	.332	.564	-.786	510	.432	-.064	.081	-.197	.070
S4 Q4	Eq. var. not assumed	1.625	.203	-.143	504.2	.886	-.011	.074	-.132	.111
S4 Q5	Eq. var. assumed	.213	.645	-.165	510	.869	-.012	.071	-.129	.106
S4 Q7	Eq. var. assumed	.893	.345	.822	510	.411	.062	.076	-.062	.187
S4 Q8	Eq. var. assumed	1.110	.293	.851	510	.395	.077	.090	-.072	.225
S4 Q9	Eq. var. assumed	2.488	.115	-.368	510	.713	-.047	.127	-.256	.163
S4 Q10	Eq. var. assumed	.226	.634	-1.91	510	.056	-.126	.066	-.234	-.018

Group Statistics – Segment Five

	Group	N	Mean	Std. Deviation	Std. Error Mean
S5 Q1	0	270	4.05	.913	.056
	1	266	4.04	.929	.057
S5 Q2	0	270	4.10	.924	.056
	1	266	4.17	.929	.057
S5 Q3	0	270	4.04	.938	.057
	1	266	4.12	.934	.057

Independent Samples Test – Segment Five

		Levene's		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	90% Con. Int. Lower	90% Con. Int. Upper
S5 Q1	Eq. var. assumed	.014	.907	.085	534	.932	.007	.080	-.124	.138
S5 Q2	Eq. var. assumed	.148	.701	-.864	534	.388	-.069	.080	-.201	.063
S5 Q3	Eq. var. assumed	.009	.926	-.937	534	.349	-.076	.081	-.209	.057

Group Statistics – Segment Six

	Group	N	Mean	Std. Deviation	Std. Error Mean
S6 Q1	0	260	4.38	.620	.038
	1	263	4.34	.628	.039
S6 Q2	0	260	4.28	.721	.045
	1	263	4.30	.680	.042
S6 Q3	0	260	4.36	.663	.041
	1	263	4.35	.635	.039
S6 Q4	0	260	4.15	.787	.049
	1	263	4.19	.818	.050
S6 Q6	0	260	4.05	.878	.054
	1	263	4.15	.856	.053

Independent Samples Test – Segment Six

		Levene's		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	90% Con. Int.	
									Lower	Upper
S6 Q1	Eq. var. assumed	.268	.605	.777	521	.437	.042	.055	-.047	.132
S6 Q2	Eq. var. assumed	.205	.651	-.320	521	.749	-.020	.061	-.121	.081
S6 Q3	Eq. var. assumed	.151	.697	.206	521	.837	.012	.057	-.082	.105
S6 Q4	Eq. var. assumed	1.020	.313	-.681	521	.496	-.048	.070	-.163	.068
S6 Q6	Eq. var. assumed	.532	.466	-1.398	521	.163	-.106	.076	-.231	.019

Group Statistics – Segment Seven

	Group	N	Mean	Std. Deviation	Std. Error Mean
S7 Q1	0	270	4.11	.870	.053
	1	266	4.16	.727	.045
S7 Q2	0	270	3.90	1.019	.062
	1	266	4.02	.909	.056

Independent Samples Test – Segment Seven

		Levene's		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	90% Con. Int.	
									Lower	Upper
S7 Q1	Eq. var. assumed	3.152	.076	-.676	534	.499	-.047	.069	-.161	.067
S7 Q2	Eq. var. not assumed	4.809	.029	-1.38	528.7	.168	-.115	.083	-.252	.022

Group Statistics – Segment Eight

	Group	N	Mean	Std. Deviation	Std. Error Mean
S8 Q1	0	257	3.34	1.096	.068
	1	245	3.29	1.048	.067
S8 Q2	0	257	3.07	1.087	.068
	1	245	2.99	1.044	.067
S8 Q3	0	257	3.62	.903	.056
	1	245	3.49	.871	.056
S8 Q4	0	257	3.60	.809	.050
	1	245	3.53	.832	.053
S8 Q5	0	257	3.13	1.154	.072
	1	245	3.38	.979	.063
S8 Q6	0	257	3.27	.850	.053
	1	245	3.24	.922	.059
S8 Q7	0	257	3.12	.953	.059
	1	245	3.09	.988	.063

Independent Samples Test – Segment Eight

		Levene's		t-test for Equality of Means						
								Std.	90% Con. Int.	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Error Diff.	Lower	Upper
S8 Q1	Eq. var. assumed	.476	.491	.551	500	.582	.053	.096	-.105	.211
S8 Q2	Eq. var. assumed	.413	.521	.821	500	.412	.078	.095	-.079	.235
S8 Q3	Eq. var. assumed	.516	.473	1.67	500	.094	.133	.079	.002	.264
S8 Q4	Eq. var. assumed	.026	.872	1.04	500	.296	.077	.073	-.044	.197
S8 Q5	Eq. var. not assumed	5.603	.018	-2.63	493	.009	-.251	.095	-.408	-.094
S8 Q6	Eq. var. assumed	1.401	.237	.347	500	.728	.027	.079	-.103	.158
S8 Q7	Eq. var. assumed	.205	.651	.311	500	.756	.027	.087	-.116	.170

VIII. Appendix C: Additional Customer Comments

I am a regular caller to the CSC and have always come away totally satisfied with the response both with timing and information. I am confident when I do call with a question that I will get the answer. They always follow up with an e-mail to advise me of the end result. Thanks for all you do! It's very much appreciated.
We need to better get the word out about the existence of the CSC. Many users continue to call me for information instead of the CSC even when the CSC could better resolve their problem.
I have used the CSC on several occasions. They are always professionally and complete my requests in a very timely manner!
I work in Hawaii for submarines and sometimes due to my location information is hard to get during my working hours. I usually have to call late and night or early in the morning to get a person.
They still seem to send a lot of the inquiries to validate/verify an action occurred back onto the end item IMS/MM rather than answer directly themselves.
My biggest problem with the CSC is that I work for the Navy, a lot of our acronyms are different and there are different ways of doing business. This communications problem leads to unresolved issues. Sometimes requisitions are cancelled that should be bounced back to the customer or NAVICP. Once a requisition is passed to an Air Force Servicing Center it is difficult to know whether or not it has been filled. Customers call NAVICP and say their requisitions were cancelled but in NAVICP's system they still show as passed to Air Force Activity.
To clarify, I do not use the Customer Support Center at Tinker for support regarding the B-1 Aircraft. I have to interface with them because I am the designated POC at the B-1 System Program Office (SPO) to address all tickets generated from B-1 users through the Customer Support Center and have to provide them the answers. We process and answer all requests...there is a great deal of duplication of effort because the Customer Support Center constantly loses the answers we provide through e-mail (they way they set it up). The Customer Support Center does not understand any of the requests that are generated by the users and therefore cannot comprehend any of our concerns as the weapon system POC's regarding any concerns we have processing these requests or to understand logical process improvements I have posed to them regarding overall improvement of the process. I would not use a middle-man who only hands-off the administrative requirement (because they do not have the requite skills necessary to answer the questions generated by the users) to a POC who can answer the question. My point...our field users should contact us directly for immediate support...we can answer their concerns in a timely manner and do not need to go through a middle-man to get an answer from someone or an organization who has no affiliation with that weapon system.
I do not have a need to access this service at this time. But if you offer this service via the internet, if I have tech need to use CSC I would.
I dealt with all the centers at various times....and I must say each time has been with complete satisfaction. I have no complaints at this time concerning their level of service.
I do not know who CSC is or what it does or how my business will benefit with CSC.
Would like to be able to access the site with my CAC card straight into it, instead of so many logins and passwords.

I do not believe that the CSC can provide the level of answers to my questions, so 90% of the time I go around their system to get the answers that I need. The 10% of the questions that I ask the CSC, through the CSC request in SMART are fwd'd to the level I tier but I have yet to receive a response from anyone on any of those request. For me the CSC is nothing better than someone to call when I need something simple done like to call in an upgrade or canx a requirement. Everything else I can normally do on my own, or by contacting the I/Ms directly.
You know, I am truly in the dark on what you are even taking about. I would love to know more about the customer service you are talking about. Sounds like it is more toward the Maintenance side of the house for procuring parts etc.
With the recent changes with DESESX and the long process of inputting information when prompted, I believe the level of access to information is much less. We used to be able to talk to item mangers directly and now we have to use a long process to get a hold of an IM in many cases.
I'm with the NAVAIR C130 program. 90% of our repairable parts are PICA to the USAF. I use SMART link and call the CSC's when we have down aircraft. The WEB would be great as long as the item managers keep their notes updated. I rarely have issues with Air Force CSC's. I do appreciate all they do. Semper Fi
I believe I am not a suitable recipient for this survey.
I use AFMC Logistic TRACKER (https://etads-fep.wpafb.af.mil/) to get most of my MICAP shipping\tracking status before I call CSC or any other Air Force base. TRACKER is down every Friday all day while the system backs itself up. During primary duty hours this is the most inopportune time for HQ AFMC to take the system down to backup or to perform maintenance. Can the downtime happen on Saturday or Sunday? Some aircraft maintenance decisions are made based on tracking information. Having TRACKER down on a Friday can generate maybe hundreds of additional phone calls to get vital tracking so our maintenance technicians and commanders can make the right decisions concerning aircraft availability. I am sure the whole Air Force is affected by this down time and it is more than a "slight" inconvenience.
Our problem is Technical. When a failure occurs, no one can get through to the engineering and technical services at DLA or all the ALC's, though CSC. CSC wants to discuss asset shipments beginning with a DODAC and they relay you to a phone number which disconnects often. The customer wants to discuss failures and the ES or engineers are not visible to everyone. The item manager can eventually be patch over by phone but they are bewildered when problems technical problems need to be discussed and they do not know who to send you to. We need the ALC codes, the equipment Specialist codes and engineering offices/code identified by each NSN in order to correct this; like in the past.
In all my dealings with the (CSC)I have received total satisfaction. They are professional and courteous, and very helpful. I am very grateful for their time and effort, and I appreciate their knowledge.
The business that I conduct with the customer service reps is very complicated, and a manual review must be completed by the Air Force rep for each and every stock-numbered item which is to be transferred to the Navy (Aviation). There are various time constraints and data transfers which must be completed by a third party prior to transfer. The majority of the time the level of communication and cooperation is sufficient to

complete our mission, but the knowledge level of the various customer reps varies and I have to adjust my operating to their level. We must train our folks to the degree required to perform the duties, and the training time varies for everyone.
Current supply information availability sucks. Congrats the Air Force has succeeded in breaking and hiding information, points of contacts and not answering telephones. Just as you learn one system it get worse by changing to a less effective system. Longer and longer delays in data processing (OH yes lets do add more links to links to links) The need for a universal order, supply management system that everyone uses for their supply needs for Air Force, DLA, and SBSS use has been promised for 20 years but no one wants to play in the same sand box because it would mean we all see the same thing and we all know each other’s business and needs and activities..... Good heavens universal accountability... What a concept!
When I call the CSC I know that all of my questions are going to be answered in a timely and professional manner. There is no hesitation on my part to call the CSC's to get any information that I may need. Keep up the good work.
Change is hard for everyone. When an item has an "L" review code or there are no notes, it would be very helpful to be able to talk to the actual I/M or M/M. Sometimes we aren't able to get that from the CSC.
Would like to see an improvement of processing times for Supply Discrepancy Reports, there are some active ones that are over 1 year old.
There was something wrong with question #1 on VII screen. It asked me to rate; and then the responses provided did not go with the question.
I would like to state that I believe CSC does a very good job and they are very efficient. The only issues I have w/ CSC are: - Not being able to get ahold of them in the evenings. - Not having a good number to reach all the CSC's.
Our main concern is there are so many programs, and each one takes special access and a password, it’s just overwhelming. We have to fight for so many parts now. They aren't available or there are long lead times for the Depot to fix, or Vender Buys so forth and so on.. We spend more time SARing and updating What should e routine items any more. I do like MOES area for following up on items and other things. I don't care for the requisition tab, we should be able to search for our SRAN. Follow up on SAR's can be slow or never happen. So many different needs. Customer Service is great, they do the best they can, but sometimes even they are limited. Not sure if this is what you had in mind. Thanks for listening anyway.
We would like a system that would be all-inclusive, would not change all the time and would be easy to train new members on. We like the automated system as long as it works the first time. The voice activated systems never seem to work as well as first thought, as well as trying to chance a password all the time.
In my opinion, your service has improved; processes are more streamlined. I've always had very good experiences with your Customer Service Representatives; they're very knowledgeable, helpful and professional. Good job!
Trying to get tracking information for Micaps is like pulling teeth from the transportation side of the house @ robins. Other CSC's are outstanding
Every time I have called they have been very helpful.
It would be beneficial for the AFMC initiatives to be shared and implemented with DLA/SMS.

The use of the Customer Service Center is important to me because I am able to get information at the time of inquiry and they are always helpful in steering me in the right direction to resolve some of my issues. Part number request is normally submitted through the Fax machine and the response is fast. Normally CSC emails me with the part number request information and what action was taken at the depot. New Technology is always good, but there's nothing like talking to an individual to get information or submitting request when the system is down. I am open to new changes and am always willing to learn new processes.
I don't have a problem with the ALC's as far as micaps are considered. The item managers are where we get most of our information about availability of parts and when certain assets will be released. I would like to see this survey done for the Defense Logistics Agency because that is where we have been having issues in obtaining parts for our weapon system. The parts availability for DLA items has suffered greatly. Their customer service is good, but what can you tell a customer when there are no assets available and there is no active contract for that item.
Overall the service I have received is good.
When will a survey for Item Managers be available?
All CSC's need to be doing things the same way. To promote efficiency and continuity. Also as they do more and more of the IM's Job They need their 201 file to reflect experience in that area. Also the Rep's ever increasing work load warrants a GS 11 Rating.
We need to automate as much as possible. The CSC is providing outstanding support. However, if it were automated, we would never be on hold and have all info readily available.
It is much easier for customers overseas to utilize the internet and email versus a phone call. The time difference is the main issue facing customers not stationed in the Continental United States.
In my opinion, customer service reps. should have more resources available to them when helping over the phone. A lot of times they do not know the answer to the questions themselves and put you on hold to ask somebody else or make some phone calls. Another issue is the turn-around time to close open tickets, sometimes I've seen as long as 2 weeks. Any help on this issue will be greatly appreciated. Thanks.
Every time I call I get a CS representative who sends a ticket to the IM who never responds.
With all the transactions I do every day it would be great that when I get an e-mail I see the doc# or stock# of the problem in question in the subject box. That would eliminate a lot of confusion when I have multiple tickets open. i also receive duplicate e-mails quite often.....also a time waster.
I always receive the best customer service when I call. (even if they can't help me)
The Service Center is an added level of people who don't have the answers except to the very simplest questions. They simply do the same thing I can currently do myself, look in SMART. I avoid using the Center whenever possible.
I think it would be better if we ordered an item such, 04, BQ. It would be nice if they directly ship to our base right away. What happened is? we tracked an item, it goes to Tracy, CA, then thru AMC enroute to our base even though it is a small item like gasket or O-ring. There is a tendency that the asset gets lost or comes to us in a long period of

time and it happened to us most of the time.. I just hope that my suggestion would bring up the process more accurately and faster for the customer to get their asset. Thank you.
Greatly appreciate all the support. The information was been accurate and beneficial.
The CSRM and AFMC CSC folks are professional and friendly; they get you the answer when you need it and follow up. I appreciate the support and will continue to use them. Their response time is above average and they stay on top of things. Overall, they do a good job!
Overall pretty happy with telephone service received. But web based platforms may be more convenient.
At this time, my only interaction has been via email requesting shipments to the contractor through the Customer Service Center. Representatives have always been prompt and courteous with their responses. Email versus telephone communication is preferable as the information is easily tracked and verified for my contract purposes. The CSC has done a great job providing exceptional service.
As a Defense Contractor supporting not only AFMC, but also SOF the CSC support is vital to our support of the "War Fighter".
The CSCs are supporting initiatives worldwide and always providing the support to the best of their ability, and always in a professional capacity; contract repair matters are out of CSC representative(s) control and we as customers need to understand each situation. Thank you for the support at all AFMC CSCs.
The Tinker call center has always been helpful to the needs of my Customer Support Section here at Robins AFB the SBSS side. I certainly thank you for all the hard work the people have put forth to us.
We have the capabilities you mention in the Survey; the problem is there not all at one site. Either that or the parts just aren't available. It makes it hard to keep our Shops happy when they have to wait for something to be bought or the CDD is postponed and we don't know that still too late. We have an inspection coming up and we have two items that we won't have available, but I must show why they are open one has been for almost a year now. Everyone just works around the problem.
Takes too long to get information. Not worth time
Someone needs to be held accountable for parts/chemicals not being available for such a long time. I have no way of talking to the item manager for chemicals that I need which are on delayed shipment status or totally unavailable for far, far too long a period of time. The CSC agents have no clue as to when backorders will be filled. If something is not available for immediate shipment then I need to know when it will be available.
It is frustrating trying to have questions answered because the CSC is not fully aware of the NSNs problems. We would like the CSC to be able to answer the following questions, instead of just reading the SMART PID, which we already do. 1. Where are we in the pecking order? 2. What is the shop flow of the depot turning out the assets? a. How many assets per week? 3. If a slow repair process, what are the problems that cause the slow repair: (training, personnel, etc?) a. When do you anticipate a get well date? 4. Are the test stations down? a. Why is it down? b. If down for parts, when are the parts due in? c. How long will the repairs take? d. What are the NSNs of these parts? 5. If a bit and piece problem, what are the parts (NSN), when are the parts due in and how long will the repairs take? a. What actions are being taken by the repair shop to expedite the piece parts? b. Are reps being inducted for cross-canns? 6. If there is a repair contract, what is

the firm contract date? a. How many per week is the contractor obligate to turn out? b. For long lead times can the contract be modified? c. Have you asked for accelerated delivery and what is the result? 7. If the ESD slipped, why did it slip? 8. Is the ACCLO/PACLLO actively involved with this problem item? 9. If the assets are in a testing stage, what is the actual testing time frame? 10. If a long lead-time with organic repair, is a bridge contract in place? a. If so, what is the ESD? b. How many assets are on the bridge contract?
I have really appreciated the help from the Call center; it has made a big difference. If the future holds a web-based service, I would also appreciate the call center still be staffed to some degree. I would be concerned as to how quickly I would get a response or when I Micap request would be input into the system. With the time zones of the storage depots to be considered, those Micap requests have to be dealt with quickly or you will lose a day. Thanks for the fine support, the call center has given me.
I like dealing with the customer service center over the phone. To me, there is nothing else like actually talking to a real person and getting my questions answered right away. I personally don't feel like anything can replace an actual person when it comes to needing answers right away.
Our stock control section and MICAP section do interact with CSC more than myself. Many times I encounter quality control problems such as overages and shortages in inchecking supplies from the depots. And TCN labels should not be pasted over serviceable tags on the box shipped to me. We do not really know when a part or supply item would come in to us, unless I am notified by the MICAP or Stock Control sections. Thanks for a good job supporting us at FB/FE6041.
I am actively involved with the CSC at Hill AFB, as a program manager we are always looking for ways to improve our processes and providing the War Fighter timely customer service, whatever the request is. We have a can do attitude and we do not turn any phone call or e-mail away.
A common ground is what we build on; a website needs contact numbers and can sometimes not answer a question.
I only email the Item Managers and do not use the phone. My main concern with the Item Managers is getting disposition on items being turned in so I can get them off base.
MICAPs are worked 24/7 and should be supported as such, not just 9 - 5.
If I need anything from the CSC I have a Wholesale Item Manager contact them.
I have been very satisfied with all my calls to the Customer Services from the Air Force.
I believe having an online source for common information as to stock number information, pricing, and availability would be really helpful and save everyone time.

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 074-0188

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1. REPORT DATE *(DD-MM-YYYY)* Mar-2008	**2. REPORT TYPE** **Master's Thesis**	**3. DATES COVERED** *(From – To)* Jul 2007 – Mar 2008

4. TITLE AND SUBTITLE

AFMC CUSTOMER SATISFACTION STUDY AT THE AIR LOGISTICS CENTERS

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)

Kendall, Kelly, D., Captain, USAF

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAMES(S) AND ADDRESS(S)

Air Force Institute of Technology
Graduate School of Engineering and Management (AFIT/EN)
2950 Hobson Street, Building 642
WPAFB OH 45433-7765

8. PERFORMING ORGANIZATION REPORT NUMBER

AFIT/GLM/ENS/08-5

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

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10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

13. SUPPLEMENTARY NOTES

14. ABSTRACT

The purpose of this research was to determine Air Force Material Command's (AFMCs) external customer issues and satisfaction levels as measured and compared by Air Logistics Center. Specifically, this project sought to answer how AFMC's Air Logistics Centers were performing based on survey criteria chosen by AFMC's A4 Logistics division. This research was guided by a previous Graduate Research Project (GRP) effort, which sought to determine how customer relationship management (CRM) initiatives varied in the private and public sectors, and to determine an appropriate means of capturing and measuring this type of data for AFMC. The research question was answered through a comprehensive literature review, and the use of survey methodology. Over thirty-six hundred external customers were given the opportunity to participate in the web based survey. The results were analyzed in an effort to determine what was important to AFMC's customers and identify future areas for improvement. Comparisons were made between the Air Logistics centers as well as the previous research conducted by Sullivan (2006) and this current research effort. The research identified that, to date, the Customer Support Centers at the Air Logistics Centers are providing consistent, valuable service to customers. Additionally, this research identified potential areas for customer satisfaction improvements and the need for AFMC to continue in its customer satisfaction improvement efforts.

15. SUBJECT TERMS

Customer Satisfaction, Customer Relationship Management, Job Satisfaction, Customer Services, Management, Quality

16. SECURITY CLASSIFICATION OF:			**17. LIMITATION OF ABSTRACT**	**18. NUMBER OF PAGES**	**19a. NAME OF RESPONSIBLE PERSON** Dr. William A. Cunningham, Ph.D., (ENS)
a. REPORT	**b. ABSTRACT**	**c. THIS PAGE**			**19b. TELEPHONE NUMBER** *(Include area code)*
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